THE AMERICAN ROSE ANNUAL 1929

THE AMERICAN ROSE SOCIETY

The American Rose Society

Committee of Consulting Rosarians

TO the best of their ability, the rosarians named below will answer questions from members of the American Rose Society in regard to roses and rose matters.

For convenience and brevity, inquiries should be made on paper large enough to allow space for reply below each question.

Questions should be sent to the nearest member of the Committee.

There is no charge for this service, but the inquirer is expected to enclose a self-addressed stamped envelope, and to state that he or she is a paid-up member of the American Rose Society.

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S. C. Hjort, Thomasville, Ga.
Fred H. Howard, Howard & Smith, Los Angeles, Calif.
George R. Mann, Little Rock, Ark.
J. Horace McFarland, Box 687, Harrisburg, Pa.
N. M. McGinnis, 621 Shannon Lane, Motor Route "A," Dallas, Texas.
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George H. Peterson, Fair Lawn, N. J.
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Dr. J. F. Selleck, 8647 Woodward St., Detroit, Mich.
G. A. Stevens, Box 687, Harrisburg, Pa.
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THE AMERICAN ROSE ANNUAL

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PLATE I. The new Favorite Dozen Roses, determined by "Experts." (See page 41.)

Colored illustrations by courtesy of the J. Horace McFarland Co.

THE AMERICAN ROSE ANNUAL

THE 1929 YEAR-BOOK OF ROSE PROGRESS

EDITED FOR THE AMERICAN ROSE SOCIETY BY

J. HORACE McFARLAND, L.H.D.
AND G. A. STEVENS

1929
THE AMERICAN ROSE SOCIETY
EDITOR'S OFFICE
HARRISBURG, PA.

THE AMERICAN ROSE ANNUAL is sent to paid-up members of The American Rose Society, who may also purchase extra copies of the current issue for $2 each. The Index to the first 10 volumes may be had for 10 cts.; and back issues may be had from the Secretary at $2 to $5 each as long as they are in print.

The MEMBERS' HANDBOOK is sent when published to all paid-up members, following the Annual. It contains lists of members at time of issue, dates of meetings and shows, and other important announcements.

ROBERT PYLE, *Secretary*

West Grove, Pa.

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By J. HORACE MCFARLAND, Editor

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MY NEIGHBOR'S ROSES

By Colonel Abe Gruber

The roses red upon my neighbor's vine
Are owned by him, but they are also mine.
His was the cost, and his the labor, too,
But mine and his their loveliness to view...

. . . . . .

They bloom for me, and are for me as fair
As for the man who gives them all his care.
Thus I am rich, because a good man grew
A rose-clad vine for all his neighbors' view.

. . . . . .

I know from this that others plant for me,
And what they own, my joy may also be.
So why be selfish, when so much that's fine
Is grown for you, upon your neighbor's vine?

Transmitted to the Editor by
ERNEST F. EILERT
of New York City

THE AMERICAN ROSE SOCIETY

ORGANIZED MARCH 13, 1899
INCORPORATED JULY 7, 1921

"To increase the general interest in the cultivation and improve the standard of excellence of the Rose for all people."

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LIFE MEMBERS pay $60, RESEARCH MEMBERS pay $20 or more annually, SUSTAINING MEMBERS pay $10 annually, COMMERCIAL MEMBERS pay $10 annually, ANNUAL MEMBERS pay $3.50; all receive all publications, are entitled to admission, upon presentation of Membership card, to all exhibitions sponsored by the Society, and can vote at all meetings.

AFFILIATED MEMBERS pay $3.50 each, and have all privileges. The rate is based at $2.50 for each Affiliated Membership if 25 or more are sent in to the Secretary of The American Rose Society at any one time prior to March 1 with the entire remittance and all addresses.

Remit to order of The American Rose Society, and address the Secretary

THE AMERICAN ROSE SOCIETY, WEST GROVE, PA.

*Deceased

THE EDITOR'S MESSAGE

INSERTED in the 1928 Annual was a return post card asking for suggestions, hints, even kicks, in relation to further issues. It is apparent, as the replies are consulted, that the membership of the American Rose Society is in general quite definitely more educated in rose-growing and more insistent upon the development of better rose-growing than at any time in the history of the organization. Putting it bluntly, we are out of the primer class, wherefore, as in duty bound, this Annual distinctly reaches forward in rose-lore.

The President, the Secretary, and the Editor each have an appeal printed at the beginning of this year's book. We have treated live subjects through the words of live members thereafter, and then have substituted for the popular "Proof of the Pudding" of other years a broad symposium on favorite roses which has been provided by the acute members of the Society in various parts of the country, who are well beyond the beginner stage. The twenty-four papers thus associated surely make available much rose-wisdom.

Following the custom instituted several years ago of clearing up the climatic relations of one region at a time, this Annual looks after California roses through sixteen articles. For himself the Editor confesses that not only has he been possessed of envy as he read these statements in preparation, but also of admiration for the rose-lore, quite universal in its application, included in the experiences of our Pacific Coast friends.

Black-spot we seem to have always with us. Deeply impressed with his own neglect in working out for himself the obvious propriety of the suggestions made by Professor Massey at a meeting of the Trustees of the American Rose Society last September, the Editor has asked for another statement on this important subject, which is again provided by the same author who worked out the control of this unpleasant rose-bother. There is reasonable ground for insisting that following the method here set forth with sufficient persistence will remove or materially reduce the black-spot menace.

The old, old question of understocks comes up. It has bred

in the Editor the strongest possible desire to have rose understocks studied much more comprehensively and capably than they have yet been studied or than it is possible to study them in and for only one locality without coördination with other localities. In order to do real service to the rose public, the understock question needs an "angel," so that various possibilities for this study available through some of the well-equipped educational and experiment station organizations of the country can be used. A consideration of our membership lists indicates that in general rose-lovers are not particularly poverty-stricken, and this has been the basis of our President's appeal, appearing on page 9. May the Editor extend that appeal by asking for other contributions toward the understock study, independent of the much-needed continued rose-disease study?

Again and gladly the Editor makes acknowledgment of the capable help of his associate, G. A. Stevens, who has lived with the roses at Breeze Hill much of the growing season, and with the roses of our friends and correspondents all the rest of the year.

In reading the acute letters so freely sent us, those in the editorial office are forced to the feeling that not only do we have contact with a group of advanced rose-growers, but these rose-growers themselves are better acquainted with expressive English. Pride is felt at the quality of the writing included in the articles which follow.

Each year the Editor promises himself and some of his too-confiding friends that the Annual will be out "early in February." Such is his earnest desire, but only those who have been "through the mill" can realize the preoccupations, the delays, and the frank procrastinations with which such an effort is surrounded. It can therefore properly be said that we have done our best to be early, even if we are not early.

No advertiser is admitted to the market pages following the text of this Annual who is not believed to be entirely dependable. Therefore our friends are asked, and even urged to buy freely and with confidence of those who thus offer to supply rose needs.

J. HORACE McFARLAND

Harrisburg, Pa.
March 18, 1929

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PLATE II The late M. Jules Pernet-Ducher at his work

See M. Dupeyrat's article, page 18
Photograph by John Wister; reprinted from the 1923 Annual

The President Makes an Appeal

By WALTER E. CLARK, Charleston, W. Va.

EDITOR'S NOTE.—For his own interest, and for the interest of the rose in America, every member of the American Rose Society is urged to read what the President of the American Rose Society here writes, and to act at once in support. It is only through general and generous underwriting that this important research problem can be advanced.

TO LEARN more about the cause of diseases of the rose, and to discover the means for their control, is, perhaps, the most significant and progressive work in which the American Rose Society may be engaged. Brown canker is the immediate menace. Opinions may differ regarding the gravity of this danger, but there can be no doubt of its blighting effect in thousands of gardens, and the necessity therefore of learning how to deal with it. There are diseases other than canker which may well be studied by plant pathologists; and the investigation of these may well accompany any extensive research connected with the main subject.

With these objects in view, our Society has entered into a contract with Cornell University. Under the able direction of Prof. L. M. Massey, plant pathologist of that institution, a series of researches to determine the life history of rose diseases, particularly brown canker and black-spot, and to discover methods of cure or control, will be extended over a long period—four years, if necessary. The estimate of cost of this extraordinary inquiry is $10,000. Half of this expense will be borne by Cornell—a generous arrangement, from our Society's standpoint. Our organization will undertake to pay the other half; but our contractual obligation extends for a period of only two years, at the end of which time we may be released in the event that we cannot provide the money, or in any other event, at our discretion.

Now, how is the American Rose Society to provide its share of the expense of this truly constructive project, so important to every one of our members? Not from regular membership dues. It can't be done! The very moderate membership fee is

completely absorbed for the services already rendered to members, including the most useful Rose Annual in the world. There is a limited fund in our treasury known as the Rose Dissemination Fund. From that our Trustees have appropriated $1,250 to cover our one-half share of the first year's investigation expense, in 1929. But that fund accumulates very slowly. The Society's administration must look elsewhere—and is already doing so—for the balance of funds needed to carry on the investigative work for the remaining possibly three years.

We look to the voluntary contributions of our members. Responsive to the notice sent out from the Secretary's office, several money subscriptions already have been received. Frankly, this brief article is an appeal for contributions from a larger number of our progressive and forward-looking members. A few organizations will help—the Pennsylvania Horticultural Society has budgeted $100 for this object for the coming year —but in the main we must depend upon the voluntary help of American Rose Society members, who, by contributing, will help themselves and all others interested in the rose. A fair number of subscriptions of from $25 to $100 each, with several hundred smaller ones, no matter how small, will insure the satisfactory financing of this most promising project. There is the further advantage that those who thus provide financial support will also inevitably be interested to extend the knowledge that successful research will make available.

It remains to add that with the undertaking assured of such financing for the whole period, our members most probably will not have to wait as long as four years for results. Field workers will make their reports surely as often as once every year. It may well be that the proposed investigations will be fruitful within the present year, and from time to time thereafter, of results which will be most valuable to all rosarians.

It is repeated that any subscription, from $1 up, will be welcomed. In remitting, it will be well to state that the money is intended for the "Brown Canker Fund."

Subscriptions should be made to the Secretary's office at West Grove, Pa. A deferred date for payment may be stated if preferred, or cash may accompany the subscription. Prompt action is urged, so that the officers may know what to depend upon.

The Regional Rose-Conference Idea

By ROBERT PYLE, Secretary American Rose Society

EDITOR'S NOTE.—In the councils of the American Rose Society there has been continual consideration of many suggestions, and, indeed, insistences, from various parts of the country that there be a general rose show, such as England and other nations enjoy. Always the miles and the seasons have interfered with the possibility of such a desirable event. Then, too, with 5,000 members it has seemed altogether inadequate that only two or three hundred should ever get together at one time in one place to discuss our mutual interests, again because of the distance and seasons involved. Consequently, the idea developed by Mr. Pyle, to whose energy is due its early adoption for a try-out on the Pacific Coast, is really of great importance to the rose in America as its interests are promoted by this Society.

IN SPITE of the seeming annihilation of distance by the telephone and the radio, and its reduction by the airplane, America continues to be a land of vast spaces. In addition to the great size of the continent, there must be taken into account, in relation to rose interests, the diversity of climate represented between northern Canada and the Mexican border, between the Atlantic and the Pacific seaboards. The conditions and requirements of one region differ widely from those of another, as do the seasonal performances of the rose. Therefore, the ambition of the American Rose Society to become an organization commensurate with the importance of America in size, population, and wealth, can scarcely hope ever to be realized adequately, unless through regional development groups may serve more intensely their local interests, possibilities, and rose-pleasures, holding connection, as well, with national rose interests.

When one considers the various methods by which interest in the rose may be stimulated, it is most natural to think at first of the part played by rose shows. The increase in the number of accessible outdoor rose-gardens, and particularly of municipal rose-gardens, maintained at public expense and belonging to the public, has, during the past ten years, been notable in America. We should certainly add at least an additional half-dozen municipal rose-gardens every year, but have not yet begun to measure up to that record.

While the municipal rose-garden provides an outdoor show

of more or less permanent quality, with a steady appeal of unexampled attractiveness often unequaled by other park features, it does not at all give the centralized effect of the shows which distinguish Germany or France or England as a whole. Every effort of the officers of the American Rose Society to propose, promote, and hold a truly national show of outdoor roses has failed, and even the shows relating to forced roses have had to be sectionalized in order to be effective.

When Arthur E. Warner, the energetic President of the successful Maryland Rose Society, which has demonstrated an increasing ability to stage notable rose shows, was requested to present to the memorable 1928 annual meeting at Longwood his ideas of a national rose show, the most and best that he could do was to hand out a challenge from his own state organization to another organization of state-wide importance, the Syracuse Rose Society, looking toward competition between the two in a pleasing rose contest.

Yet today California is sending flowers by airplane to New York for indoor shows, and improved methods of transportation hold out a vision of possibilities heretofore undreamed of. But ever so creditable a display of roses from widely separated parts of the country must fail to be truly effective toward making the rose universal in America without a meeting of the minds and individuals interested, to discuss with each other the perplexities and problems of rose-culture. Thus, any meeting of roses without folks who grew them would lack the interest, zest, and success that should characterize a truly national rose show.

It would seem, therefore, that not so much extensive development as an intensive growth is suggested. The wheels are already in motion to give every group of real rose-growers an opportunity to function toward this end, and to secure for themselves at least the satisfactions of display, contest, conference, and interchange.

At the meeting of the Trustees preceding the Annual Meeting of the American Rose Society, held at West Grove, Pa., September 20, 1928, the following action was taken:

The Secretary proposes organizing Regional Conferences by bringing together the Vice-Presidents and Local Secretaries in those sections where members live within convenient reach of each other, having them select a leader,

and plan meetings, to which a field representative or officer of the American Rose Society could be sent if practicable.

It was duly moved, seconded, and carried that the Secretary's proposition be approved, and the Executive Committee was authorized to take such action in support as it deems best from time to time.

The membership of the American Rose Society in the sunny states west of the Rocky Mountains has, from the very beginning, shown a keen interest in the possibilities of such shows of more than ordinary state importance which we have come to call Regional Rose Conferences. It, therefore, seemed entirely logical that the first of these shows should be organized among those who had already followed out the general idea. Therefore, the Executive Committee, after due consultation, invited a committee to organize the movement for a Regional Rose Conference in California, itself a state so extensive in area and so broad in rose interests that a true Regional Conference could well be carried forward there, with or without connection with the rose interests in Oregon, Washington, and British Columbia.

The committee thus invited includes: Mrs. Charles C. Derby, 114 Route C, San José, Calif.; Forrest L. Hieatt, Box 865, San Diego, Calif.; Dr. E. M. Mills, 2429 Poinsettia St., Santa Ana, Calif.; Rev. S. S. Sulliger, 1510 N. 9th St., Tacoma, Wash.; Capt. George C. Thomas, Jr., 1014 Crescent Drive, Beverly Hills, Calif. Mr. Frank C. Riggs, a Trustee of the American Rose Society, was invited to coöperate *ex-officio*, and also Mr. J. Fyfe-Smith, of Vancouver, B. C., was suggested, whose interest could guarantee the international end of this undertaking.

These individuals have enthusiastically taken hold of the idea and the opportunity, and promise to carry forward the plan to the best of their ability. At this writing, details are not yet available, but invitations have been received by the Committee from the San Diego Society, in the south, and from the Portland Rose Society, in the north, and it is understood, as well, that San José is equally eager. Without doubt, the committee will select the location best adapted to the success of the Conference.

Now there are many other sections of the United States within which Regional Rose Conferences could certainly be organized to complete success. The federating of many garden clubs in state organizations is an index of the conception garden

folks are acquiring of the value of coordinating their activities and thereby pyramiding their resources.

It is hoped that requests from many other regions for the holding of Regional Rose Conferences will develop, and to such requests the Secretary's office pledges its immediate and careful attention and coöperation.

We expect that representatives of the national organization will volunteer to serve as liaison officers, both in good will and in information, and thus carry through the idea of participation by the American Rose Society.

As this thought develops and is availed of, doubtless skeleton programmes will be suggested and tried out, looking toward the success of the undertaking wherever it may be localized. It is believed that advantage will always be found in promoting not only a show but a thoughtful conference in which experiences may be interchanged under orderly control. We will welcome ideas and propositions looking toward the formulation of these suggestive programmes.

One of the constructive ideas that has been put forward is that a Regional Conference could well set on foot the planting of selected main highways to definite rose effects, such as, for example, was reported in the 1928 Annual on page 21 by Mr. M. Glen Kirkpatrick in his account of "Cape May's Rose Highway." By organization and cooperation, some 78 miles of highway had been planted with more than 2,800 bushes of Paul's Scarlet Climber, to vast advantage. For those who may not have the 1928 Annual at hand, it is here repeated that an energetic committee persuaded every farmer along the selected route to buy the rose plant at 50 cents, provided he would plant it in front of his house, and with the further proviso of a second plant for 25 cents additional. "Not a single farmer has refused the offer," writes the energetic organizer. Consider miles of American Pillar, of Dr. W. Van Fleet, of Mary Wallace!

It may be noted that these Regional Conferences are a natural development and extension of the rose pilgrimage idea which has proved so successful in past years. The "get-together" thought underlies all such suggestions, and as we get together and work together, we advance most definitely our stated purpose of "a rose for every home—a bush for every garden."

What Is a Rose Pilgrimage?

By THE EDITOR

THE first part of the answer is that a rose pilgrimage is a very pleasant event, not only because of the associations it involves between rose friends, but because the clerk of the weather seems to look with favor on the idea. In more than a dozen years of eager participation in various rose pilgrimages I can remember but one day of bad weather—a day on which there was a heavy rain to make looking at roses unpleasant.

But to explain what a rose pilgrimage is, if the term itself is not completely self-explanatory, let me say that it means a gathering of any number of rose friends, from two to as many hundreds, who on a predetermined day go to see one or more rose-gardens that have been opened to them. There are no formalities, and the idea is not copyrighted. In fact, it is so free and open that it seems to have been taken up by that excellent organization, the American Iris Society.

As I think over the many occasions on which the rose pilgrimage idea has worked out, I am taken back to the day when I was first induced to mix with the American Rose Society, nearly fourteen years ago, on the occasion of an official pilgrimage to the rose-garden in Elizabeth Park, Hartford, Conn. There Robert Pyle, then as now zealously interested in the rose and in rose associations, talked me into agreeing to attempt an American Rose Annual, first thriftily extracting from me the price of a year's membership in the Society! He got me into plenty of trouble, but it has been pleasant trouble, because it has brought me smiling rose friendships the world over—the smiles coming not only face to face but also in hundreds of letters that are good to read and good to treasure.

Because there is no formality at all in these visits, the purpose of this particular statement in the 1929 Annual may seem rather vague. I do not find it easy to propose a plan for promoting more rose pilgrimages, because hardly any plan is needed except the desire to see roses in good company.

But I am wrong. There is one need that is definite and toward which this statement may steer those who are interested. To

see roses, there must be roses to see. This is a formal, official, authoritative, and in every other way as forceful as possible, request of rose friends who read it to state on the card enclosed in this Annual *their willingness to let their roses be seen when in bloom* by other members of the Society.

I am trying to make the proposition as definite and simple as possible, so that those who have only a few roses to show will be willing to have them seen, while those who have a great many roses will be glad to have them seen. None of the pilgrimages in which I have participated presumed any very great superiority in the display at the places visited. Always it did assume the completest and heartiest invitation to enjoy the rose at the place or places designated for the day of the pilgrimage.

Sometimes there have been enough members of the American Rose Society to bring about a little meeting, and somebody was moved to make a speech. Sometimes there have been refreshments, though mighty few rose-lovers need any other refreshment than the opportunity to see, enjoy, and study their favorite flower. The only essentials for a rose pilgrimage seem to be a place to gather, a place to go, and space in automobiles for those who are not so provided.

Perhaps a few experiences may give a key to the situation. I think my first rose pilgrimage was to two or three gardens in St. Catharines, Ontario, to which I was led by a committee of one, consisting of the late and much-lamented W. B. Burgoyne, by all means the most important man in St. Catharines and also just an humble rose-lover. We saw, admired, and profited for a very happy hour.

But this was not actually the first. I remember now, that was the occasion on which Mr. Pyle ensnared me in Elizabeth Park, Hartford, above detailed. I have been more than once to beautiful "Twin Oaks," the hospitable home of Mrs. Charles Bell, in Washington, where both the roses and the hospitality were delightful. Mrs. Harold Irving Pratt gave us a memorable day at Glen Cove, on Long Island, one year, during which we learned much about how roses might be used in the landscape. A day never to be forgotten was one during which three important rose-gardens were visited in the Boston vicinity, including the Hunnewell garden, the Frothingham garden, and

the Crane garden. Another really extraordinary day, by the aid of the automobile, took us touring through many miles of rose-loving Ontario, to see both small and large gardens.

It would be improper to omit a statement concerning the annual meetings of the American Rose Society, which have included pilgrimages twice to Longwood, the home of Mr. and Mrs. Pierre S. duPont. No one who has made that journey needs to be reminded of its pleasure. Since I thought of writing this statement I have had a letter from Mrs. William Thaw, Jr., who has a delightful rose-garden near Pittsburgh which she wants the American Rose Society to penetrate some time in June. My own Breeze Hill garden has never been closed to anybody, but it is wider open (if that be possible) to members of the American Rose Society than to anyone else, and in 1925 there gathered there not only friendly rose folks from Harrisburg, but also others who did me honor by coming long distances to join in a wonderful afternoon of rose enjoyment.

I hope I have made plain the total informality of these gatherings. We have gone to see the Bobbink & Atkins roses, near Rutherford, N. J., with thousands in bloom, and we have very contentedly stopped the same day at a back yard with a dozen in bloom. We have inspected the plantings at West Grove, Pa., right at the home of our Secretary.

Now the inquiry that will be enclosed in this Annual will ask members who have rose-gardens to say *how many roses they have* and, within approximately a fortnight, about when members of the American Rose Society would be welcome to see them. I hope the response will be sufficiently extensive so that in the Members' Handbook, which will be issued before roses bloom,* there may be information about the number of roses available in various gardens and about when they may be expected to be doing their prettiest. This information, as published in the geographical list of members, will give a new power of acquaintance and is sure to bring about many more pleasant rose pilgrimages.

*Just as these pages go to press comes information, from Mrs. C. C. Derby, of San José, Calif., concerning five California pilgrimages to which are invited "all members of the American Rose Society":

April 21, 1929: Pilgrimage to rose-gardens on the Monterey Peninsula, as guests of Mr. Francis E. Lester.
May 4–5: Rose Show, Hotel Saint Claire, San José.
May 11: To Rose Acres, Hayward, Calif., as guests of Mr. John Smith.
May 18: Fiesta de las Rosas, Floral Parade and Pageant, San José.
May 24: Rose Pilgrimage to Golden Gate Park, San Francisco.

Pernet-Ducher

By J. DUPEYRAT, Honorary President Rose Section,
National Horticultural Society of France

EDITOR'S NOTE.—Undoubtedly no man in the present generation has had so great an influence on the modern rose as the great French hybridizer who passed beyond on November 24, 1928.

It is especially fitting that we present an appreciation of Pernet-Ducher by his friend, himself a very great French rosarian. M. Dupeyrat has not only been the friend of the rose in his own land, but the friend of every American who has gone to Paris to participate in the great rose events which make Bagatelle the radiating point for rose reputation. His tribute to the rose master of this generation is a classic of appreciation.

The photograph of Pernet-Ducher, presented as Plate II, facing page 9, is reprinted from the 1923 Annual. It was the result of a snapshot made by John C. Wister, then Secretary of the American Rose Society.

ALL friends of the rose in France, both professional and amateur, are deeply grateful that the American Rose Society has joined us in sorrow for the death of our great and dear Pernet-Ducher. It is an irreparable loss, not only to our national horticulture, but also to the whole world.

While he is honored principally because of his work, Pernet's life also deserves to be cited as an example worthy of admiration. He was "a self-made man" in the full meaning of your term. His beginnings were very modest, but he had an artist's soul and the love of work that nothing could check. From youth his faith, his will, his intelligence and physical forces were bent to the pursuit of his ideal. Soon the technique of his trade held no secrets for him, and his creative talent began to be revealed. The attention of his colleagues was soon attracted and transformed itself gradually into respect of so high degree that he was soon classed in the forefront in the esteem of his confrères in Lyons, already so rich in master gardeners of reputation. His success was never due to intrigue; he was a man most opposed to compromise. He was sometimes referred to as a hard character, difficult to deal with, but truly he was only the slave of the honesty and integrity that never compromised.

What he thought to be just, that he did; what he thought to be true, that he said without regard to consequences.

He was not a flatterer, yet all his customers became his friends because they were won by his professional and moral ethics.

He was very careful to send out only high-grade merchandise; he would not intrust the care of selection to anybody; the smallest order would go through his own hands, and he would treat it with the same consideration and careful handling as the largest.

An eminent hybridizer, he operated with unbelievable simplicity, no affectation, no stage play. I remember that one day when I called, I found him coming out of his house, about to proceed to some hybridization. He was dressed as a day laborer—a big straw hat over his eyes and wearing a long apron. Had it not been for the expression of his eyes and face, one would have taken him for the lowest of his workmen. He was carrying a little basket to which my eyes were attracted. Pernet smiled and lifted the cover; I saw in it a budding-knife, a pair of scissors, tweezers, and two or three small paper boxes. This was his whole equipment. "This basket," he said, "is the one in which my wife carried her lunch to school when she was a child; all my roses came out of it." Such was the man.

What has been his work the whole world knows. I have already had occasion to mention his most important originations in an article published in the American Rose Annual of 1926 (pages 172, 173) and to relate how one day he was so impressed by the color of Austrian Brier (Persian Yellow) that he conceived the ambition of transferring it to the garden roses. That was the origin of the magnificent strain of roses which has made his glory and which, as a just homage to his skill of creator, bears the name, *Pernetiana.* From the first-born to the last child of this parentage, what an incomparable range of colors and novel shades! What a wonderful improvement has been carried on from one variety to another, from Soleil d'Or to Willowmere, Ville de Paris and Julien Potin, passing through Arthur R. Goodwin, Lyon Rose, Louise Catherine Breslau, Rayon d'Or, Mme. Edouard Herriot, Constance, and the Souvenirs de Claudius and Georges Pernet! Step by step, the shades were harmoniously blended, and solid colors affirmed themselves in all their purity! The foliage, at first scanty and subject to early dropping, became more firm and strong, surrounding the flowers with a vestment worthy of them; hardiness and vigor have been added to richness of tones and the

abundance of bloom. The Pernetianas have multiplied innumerably, and the race already represented in all countries still grows in numbers and beauty.

If Pernet worked much and produced much, justice was rendered him. Abroad he won remarkable successes and high rewards. In London, Mme. Edouard Herriot won for him the *Daily Mail* Cup; in 1920, Souvenir de Claudius Pernet won him the grand prize of the International Flower Exhibition at Antwerp. He also obtained the highest award of the International Expositions of London, 1894; Milan, Italy, 1906; Saragossa, Spain, 1908; Ghent, Belgium, 1913. In 1924 the Massachusetts Horticultural Society awarded him its large Gold Medal for "eminent services rendered the horticulture of the world." Last, but not least, the American Rose Society made him an honorary member—an honor so much the more flattering because it is so rare.

In France, he won the Gold Medal of the International Contest of Bagatelle thirteen times, from 1907 to 1925. The French Government recognized his services by making him a Knight of the Legion of Honor, and he was about to be promoted to the rank of Officer; his colleagues of the French Rose Society had just made him Perpetual Vice-President of their Society by unanimous vote of affection and gratitude; so we can say of him that, contrary to the proverb, he succeeded in being honored not only as a prophet in his own country, but what is more rare and difficult, as a prophet in his profession.

This man, so fortunate in his art, had two great sorrows: his sons, Claudius and Georges, whom he hoped to be his successors, were killed, one after the other, on the battlefield during the war. He dedicated two of his most beautiful roses to their memories. Of his bereavement he spoke little, but we who knew him could see that sorrow was eating at his soul.

His health, for so long a time robust, began to decline and the exigencies of his business compelled him to transfer his establishment to younger men whom he had taught his fine art. He died surrounded by his family and friends, and all we have of him are his ever-lovely roses and his memory which will remain imperishable.

Breeding Roses at Home

By CAPTAIN GEORGE C. THOMAS, Jr., Beverly Hills, Calif.

Editor's Note.—Out of his long experience with rose-breeding, Captain Thomas has here presented the simple essentials for that fascinating pursuit. It is in point to mention here that at the great International Rose Congress, held in London, in July, 1928, the necessity for the breeding-in of new blood was emphasized by Mr. Darlington, President of the National Rose Society (of England), as reported on page 179 for us by Mr. Nicolas, one of the representatives there of the American Rose Society.

Previous numbers of the Annual have given much information and suggestion as to rose-breeding. The mechanical details are described and illustrated in the 1918 Annual (page 51) by Prof. E. A. White, head of the Department of Floriculture in Cornell University.

NEW or "novelty" roses are always more interesting to see come into bloom than established kinds. Many people get a real "kick" from testing them, and some secure an additional and still greater thrill by propagating them in their own gardens. Considering the widespread interest in the development of new things, it is surprising that so few rose-lovers breed seedlings, because there is ten times more pleasure and excitement in watching the growth of a plant of one's own raising than in trying a rose created by another. Further, when he grows his individual productions, the rosarian controls the situation, at least as to distribution. If the new roses are not distinct enough to place on the commercial market, they nevertheless create enthusiasm and interest, and the best of them should be worthy of a place in the owner's garden.

I have brought out eighteen new roses, after nearly twenty years of rose-breeding work, thus securing an average of about one a year which I considered valuable enough to name and to place before the rose world. During some seasons the total number of seeds sown ran as high as 10,000. It will, therefore, be appreciated that only a low percentage was deemed suitable for general consideration. A large part of this experimentation was in connection with the possible evolution of new types of roses, in which endeavor much less success may be expected than in breeding for variation in established kinds.

Within the last five years I have grown more than a hundred attractive seedlings from experiments designed to produce

diversity and advancement in established groups, and while it is doubtful if more than a few of these originations will be disseminated, there is tremendous pleasure in observing them, in giving specimens to friends for their gardens, and in sending them to various sections of the country to be tested.

Probably, few people develop home seedlings because of a general belief that it is extremely difficult and demands special knowledge and equipment. The fact that there is scant information in books, and no one volume dealing directly and practically with the subject, further fogs the undertaking, in addition to which the history of many old-time crosses is unrecorded and recent offerings are not seldom presented without statement of their ancestry. The amateur hears about "three generations before an answer is obtained," and there is considerable propaganda relative to the required skill, expense, and difficulty of breeding. Most of this is gross exaggeration.

Special characteristics or unique innovations demand intensive, quantity production over a long period. Nevertheless, it is comparatively easy to secure reasonable change and quality in present types. Varieties of merit can be bred by an amateur with little more effort, time, and cost than he expends in testing novelties and in propagating them in his own garden. Information heretofore published in the American Rose Annual, from year to year, if studied collectively, is sufficient to enable a rosarian to manufacture valuable seedlings. There are many opportunities for progressions. A number of classes are in need of revolution and additions. New Tea roses are required for our southern zones, and the continuation of experiments for obtaining a more perfect hardy everblooming climber is desirable.

The average grower may pursue this work outdoors without protective aid. He may hybridize the chosen favorites in his garden, and often he will obtain results from plants which form seeds without artificial help. He can effect germination outside and raise the young plants without glass; but with minimum greenhouse protection he may do much more, and can often procure hips from bushes which refuse a crop in the open. Time is saved by germinating and propagating under cover, while weaklings which might die outside will be brought on safely. It is surprising how much may be done in the garden,

and even more remarkable how much additional can be accomplished in very small greenhouse space. It is most satisfactory to use both methods; each has its own advantages.

If one will study the ancestry of modern kinds, it will be realized that many of the best come from blending two parents, both well-known in commerce. Striking examples are the popular Los Angeles, from Mme. Segond Weber and the Lyon Rose; and the famous Frau Karl Druschki, which was the issue of Merveille de Lyon and Mme. Caroline Testout. Pedigrees, in many cases, prove that one-generation breeding has been successful, although it is occasionally difficult to identify any distinguishing trait of the pollen parent. The influence of the pollen is as vital as the selection of a receptive mother in any intended differentiation. The pod-bearer must ripen seed readily, must transmit foreign qualities from the sire, and must confer a high percentage of germination. The father should transfer certain desired characteristics to the rose children, and this is possible in a greater degree than is understood. Fortunately, there are enough pedigrees to enable us to choose roses which have mothered many diversified varieties, and the selection of such female plants is the key to the situation, whether one desires change in any well-known sort, or a comprehensive remodeling. The best practice is to employ pollen parents which have qualities desirable to convey, and to trust the proved seed-bearer to carry out the project.

It must not be forgotten that in the old days new races and varieties came from chance fertilization, or from seeds ripened by parents cultivated in the open for that purpose. Many advances were made without artificial pollination. A few sorts may be pollinated with great ease in the open; others will yield nothing indoors, even after every rule of known practice has been observed. Varieties which ripen seeds in the rose-bed are the safest to hybridize outside, and, in some cases, seeds matured outdoors give distinctly greater germination and strength of offspring than those secured on the same seed-bearers in a greenhouse. There are certain bushes in our garden which give us just as valuable seedlings in established families from hips furnished by normal causes as those we obtain from selected varieties crossed under glass, and there is no doubt that

many outdoor seeds have been lost to the rose world that would have yielded superlative kinds had they been cared for.

But naturally formed hips will not, as a rule, provide new groups or races, yielding only differences of color, form, habit and other minor improvements. Breeders must not expect too much from such seedlings; they are fascinating, unknown, but are not so sure in astonishing outcome as those which are afforded by the more painstaking course of artificial hybridization for some special purpose. In the first instance, the whole proposition is speculative, but to some extent restricted; in the second, the selection of the parents forecasts what will be attained, and occasionally anticipation becomes realization.

This whole proposition is worth thoughtful consideration and investigation before experiments are commenced. If a grower desires to work without great effort or expense, he will acquire practical diversity from the germination of regular or hybridized seeds in his garden. If, on the other hand, he wishes to produce a specified change or to secure an unusual advance, he must carefully study and select the factors, and his problem virtually necessitates the use of a small greenhouse, for the reason that the plants can be handled much more effectively with controlled conditions. This applies most especially to combinations likely to present a wide divergence in offspring.

Those who raise seedlings from naturally fertilized hips have the aid of insects which carry pollen from one rose to another, as well as the variation supplied by the mother parent fertilized by the pollen of its own flower. It is but a step from raising such seed to outdoor artificial hybridization, and then not a difficult advance to the better indoor control.

There is also the further chance of betterment by using selected budwood of known varieties, and this is an easy and sure method of securing definite improvement in commercial sorts, and is of prime necessity in bringing any seedling to the greatest perfection.

The amateur rosarian is overlooking the most delightful part of rose-culture when he does not attempt to produce and enjoy his own novelties, though he is prayerfully besought not to introduce them to commerce unless he has obtained the approval of impartial critics as to their superiority.

PLATE III. Four notable new roses as grown in the Editor's garden

Above, Abol
Below, Scorcher

Above, Director Rubió
Below, Charles P. Kilham

PLATE IV. A bowl of RENE D'OR, cut on Christmas Day in the garden of Mrs. George Lent, Redwood City, Cal.

Photograph supplied by Dr. Emmet Rixford, of San Francisco

Propagating Roses at Home

By DR. C. C. BRAMBLE, Annapolis, Md.

EDITOR'S NOTE.—Dr. Bramble has delved into a very popular subject. In spite of the fact that the principles of rose-propagation are very simple, and have been stated over and over again, we have many inquiries on the subject.

MY PRESENT practice in propagation is the result of study of all the articles I have been able to find on the subject, conversations with propagators, and my own experiences. I have had some successes and some failures, and I make no claim to infallibility. The programme follows:

Budded Cuttings. From July 10 to September 15, I propagate roses by budding on canes of Odorata according to the method carefully set forth by Martin Bilon in the 1925 American Rose Annual (page 65). Instead of the usual raffia, I use a rubber band about three-sixteenths of an inch in width (as suggested by J. H. Nicolas in the 1924* American Rose Annual, page 38) to tie in all the buds I set. The rubber appears to be much superior to raffia, and as soon as one masters the trick of catching the end under the last turn it becomes very easy. Three to ten days may be allowed to elapse before making cuttings of the canes. My results with budding on Multiflora canes have been uniformly poor and on Odorata somewhat uncertain. The novice will experience difficulty in getting the buds to begin growing after the cuttings have rooted. This method is recommended only when the supply of understocks is low.

Cuttings. From August 15 to October 1. I take cuttings of climbers with three or four eyes, and also other roses that succeed on their own roots. I pot these cuttings in 2-inch pots in sandy soil, and set them in a coldframe shaded by a lath shade at least 1 foot above the sash. During warm weather I spray the foliage with water once during the heat of the day. (A pressure sprayer with a Vermorel nozzle is excellent, but the

*A fine statement of how to cut the bud is to be found in the same article. "Many fine, strong buds would be ruined by taking them as recommended in the Pemberton book; that is, cutting the bud with a large piece of bark, removing the wood, and then trimming the bark to size. It is better to start the cut about three-eighths of an inch *below*, and to cut closely enough under the bud so that the wood is very thin and the green tissue under the eye is clearly visible as a round green spot. Do not remove this tiny bit of wood. I cut the bark of the bud squarely off about an eighth-inch above the eye, and insert it in the incision so that the square upper end is in contact with the bark of the understock at the cross cut. Buds set this way seem to make a better-looking job when healed."

ordinary atomizer may be used.) The soil in the pots is watered just enough to keep it moist, not wet. On hot days, place another lath shade on top of the first one.

Make the cut at the base of the cutting about $\frac{1}{32}$ inch below the point at which the leaf was attached and let it slant (if at all) with the eye on the lower side of the cut. The first roots frequently appear just below the eye, and if there is a tip on the side opposite the eye, the cutting may die back on that side.

I take cuttings of Odorata at this time, using four-eye cuttings with the two lower eyes removed. Odorata is exceedingly easy to root, and I have taken cuttings as late as the first week of December that rooted in early spring and made fine plants for budding by midsummer. By using small pots, it is easy to tell when the cuttings are well rooted, as the ball of earth can be removed from the pot without disturbance and the roots will be seen. When well rooted, they may be given a little ventilation by raising the sash ½ inch at one end. If several varieties of cuttings are put in one frame, it helps to have another frame to which they may be removed when rooted, and given ventilation. A lath shade should be kept over rooted cuttings. When the weather is moderately cold and the plants are almost dormant, repot in 3- or 4-inch pots, using soil of fine texture mixed with about 20 per cent cow-manure.

Budded Plants. I use mainly Multiflora and Odorata for stocks, and find it little more trouble to produce my own understock plants than to buy them. In both cases they require my attention from early spring until budded. This year I planted Multiflora seed in a flat indoors on the second of March. The young seedlings appeared in about two weeks. Some of the seedlings I potted in 2-inch pots and set them in the garden about two weeks later; others I set out directly from the flat, placing them 1 foot apart in rows 3 feet apart. They could be set more closely, but I prefer more working-space. Those potted made a little better start, but by late August both lots made fine plants. Late in the season most of them would measure about $\frac{5}{8}$ inch in diameter at the collar. In July I removed from the collars of the plants any roots that might interfere with budding. Of 130 Multiflora plants set out, 2 were not budded on account of size, and 2 because the collars were very short.

Last year I grew my stocks from seed sown outdoors in autumn, and I had to discard about 20 per cent.

Between August 15 and October 1, I bud the Multiflora plants grown from seed planted the previous spring or fall, and the Odorata plants grown from cuttings taken the previous fall. These plants I find far better for budding than if they are kept over another season. The bark then becomes very heavy and the canes are painfully numerous and thorny. If the plants are grown in the seed-bed the first season and are crowded, of course, a second season's growth is essential to secure a plant ½ inch in diameter at the collar. This is the usual nursery practice.

During late August and all of September I find very few good, strong, plump buds of the varieties I am working with that fail to "catch." At this time the understocks are growing prodigiously, and if raffia is used, it should be cut in two to three weeks.

Labels. I label each plant budded with a label showing variety of bud, understock, and date bud was set. Wooden labels (advertised in the Annual) are satisfactory for about one year. The best labels I have seen are made from sheet pyralin that can be obtained from the DuPont Viscoloid Co. This material can be had with a finish that takes and retains lead-pencil writing. It is, apparently, unaffected by the weather and easy to cut to any size label desired. Moreover, the lead-pencil writing can be erased and the label used again.

In late February or March following the budding operation, when the Multiflora and Odorata plants show first signs of activity, I cut them off above the inserted bud. When the bud has pushed out and made a growth of about 4 inches, the tips of the new shoots should be pinched off to induce the plant to branch at the base. It is also essential to tie the growing shoots securely to a slender stake, as the union of the new growth and understock is none too strong for the first few months.

The most important things about the foregoing are the *time* and the *detail.* Success in horticulture demands doing the right thing at the right time. The date given would have to be modified for locations with different climates. Hottes' "Practical Plant Propagation" gives July 1 to 10 as the proper time to bud roses at the Geneva Experiment Station in New York. This is about the worst possible time at Annapolis.

What Understock Do You Use?

By MRS. GROSS R. SCRUGGS, Dallas, Texas
President Texas Federation of Garden Clubs

EDITOR'S NOTE.—Mrs. Scruggs has here fairly set out a most important question. Our rose merchants ought to answer it, at least by definitely knowing and stating the stock used for each variety.

For many years the Annual has been publishing information about understocks. Articles appeared in 1921, 1922, 1923. Mr. H. H. Hume presented in the 1921 Annual a careful, illustrated study of "Rose Stocks and Root Systems." In 1927, Mr. Guy E. Yerkes, of the Federal Department of Agriculture, gave precise details in "Rose Understocks at Arlington Farm."

WILL every understock on which the roses of today are budded grow equally well in every locality? When one buys a rose for trial, is there a test for satisfactory results of the variety, or of the understock? Since the fact has been so generally accepted that budded roses surpass those grown on their own roots, I wonder that so little emphasis has been given by dealers to the understock on which their plants have been budded.

We buyers run two risks when we buy plants: first, that the variety of rose may not be suited to one's locality, and, second, that the understock may not be congenial either to the variety in question or to the locality to which it is sold for planting. Possibly this accounts for the varying success of the newer roses, especially in the same locality. For instance, Mrs. A. buys a plant and reports a satisfactory, lovely rose, while Mrs. B., her neighbor, buys the same variety from a different dealer, and finds it thoroughly unsatisfactory, although the soil and care given both plants has been practically the same.

Could it be possible that Mrs. B.'s failure was due to the rose being on the wrong understock for her locality, rather than that the plant was unhealthy? In other words, that Mrs. B.'s plant was healthy, and would probably have flourished had it been placed in *its* proper locality.

Buying without adequate information as to the understock may be an expensive experiment, especially with the new roses, and in reality it is not fair to the rose that is being introduced. I realize that this requirement might put an additional burden on the dealer who does not himself grow all the roses he sells,

but is it unreasonable to ask that the new rose have a really square deal? I am told that in Florida the growers of orange and grapefruit trees for planting in groves are very particular to send young trees budded on an understock known to be adapted to the locality in which the planting is to be done.

This question was brought forcibly to my mind when we began to plan to ask the Garden Clubs of our Texas Federation to request interested members to buy three or more of a variety of the new roses, that we might prove which is the best for Texas. We found that many varieties could not be secured from our retail merchants propagated on the understock known as the Dog rose (*Rosa canina*), known to be very satisfactory for this locality, and, having no definite knowledge of what stock other dealers were using, we hesitated to urge our Garden Club members to try so expensive an experiment, with no assurance that the plants would grow satisfactorily.

It is the ambition of every member of the American Rose Society that each city have a municipal rose-garden,* and, wherever possible, a test-garden. We in Dallas hope to have such a garden. How are we to know where we can secure the newer roses (budded on stock proved to respond satisfactorily in this locality) that a real test can be given the varieties only?

If some way could be devised whereby rose catalogues might carry this information, possibly by placing after each variety name an abbreviation which would tell what understock had been used for it, the buyer might have the opportunity of making a selection at his own risk. Many of the iris catalogues state the parentage of the varieties, so that an intelligent buyer can know the stock, and decide if he will risk that iris for his locality. Why cannot we buy roses with the same intelligence?

With this in mind, and granting the fact that the question of what understocks are best for a given locality, or the one best for each variety of rose, has not been definitely settled, could not the matter be decided sooner if the buyers could help in the experimenting, through buying with full knowledge of the understock?

Mr. Rose Merchant, what understock do *you* use?

*Just as the Annual goes to press, Mrs. Scruggs reports the definite appropriation by the Dallas park authorities of funds for starting this rose-garden.—EDITOR.

Rose-Disease Work at the New Jersey Experiment Station

By PROF. RICHARD P. WHITE, New Brunswick
Research Specialist, New Jersey Agricultural Experiment Station

EDITOR'S NOTE.—Important results in the understanding and control of rose-diseases may follow the work below mentioned. It is significant that research work should thus be proceeding in two great scientific institutions.

THE work on rose diseases at the New Jersey Station was initiated in 1927 by the creation of the position of Plant Pathologist for Ornamentals.

While the work has not progressed to the point where conclusions can be drawn, a statement of the lines of research followed may be of interest. They are as follows: (1) field and greenhouse control of black-spot; (2) control of brown canker; (3) determination of resistance and susceptibility of the various roses to these two diseases; (4) control of storage mold.

The most interesting feature of the work thus far has been the discovery that brown canker, from a commercial standpoint, becomes serious only on certain Teas, Hybrid Teas, a small number of Hybrid Perpetuals, and a large number of Pernetiana varieties. As a family, the Pernetiana group is the most seriously injured, because of susceptibility to the die-back type of infection. This type of infection also occurs in other groups, but not to such a serious extent.

The type of infection most common on the Hybrid Teas and Hybrid Perpetuals is the cane-infection, causing, the first year, the small whitish areas with which most rose-growers are familiar. Recent experiments indicate that these can be prevented from further development in the following spring.

The most serious phase of brown canker is, then, on those varieties which consistently show die-back due to *Diaporthe umbrina* as fully described and illustrated in the 1927 Rose Annual by Miss Jenkins. The initial infection lesions will evidently succumb to treatment, but the die-back condition is going to be more difficult to control. It is likely that varieties most susceptible to this type of infection will be automatically supplanted by more resistant varieties.

Black-Spot Again

By L. M. MASSEY and CYNTHIA WESTCOTT,
Cornell University, Ithaca, N. Y.

IN THE American Rose Annuals for 1917, 1918, 1922, and 1925, the senior author discussed the nature, cause, and control of black-spot. Experimental data, based on carefully conducted tests of standard spray materials, were presented, and recommendations made for the control of this ubiquitous disease of the rose. Since the publication of these articles, the writer has been in touch, mostly through correspondence, with the successes and failures of many who have attempted to follow the suggested control measures. The junior author has conducted additional tests, using several new materials. It seems worth while at this time, then, to review the situation briefly and emphasize the chief causes for the relatively few failures that have come to our attention. A sufficient number of successes have been reported to substantiate the experimental results amply and to leave no doubt of the merits of the method, if properly handled.

Etiology. Black-spot is caused by a fungus (*Diplocarpon rosæ*). This plant lives over the winter outdoors in the old leaves. It may also be carried over as mycelium in stem-lesions (see illustration facing page 40) on some varieties, especially those of soft wood,* but the old leaves are the principal host. In the spring, soon after the first leaves develop on the plants, spores are carried from the dead leaves to the new ones, mostly by splashing rain. Infection results in the formation of black spots. The diseased leaves commonly turn yellow and fall prematurely. Soon (from seven to nine days after inoculation, as determined by infection experiments in the greenhouse, at about 75° F.) a crop of spores is formed in these black spots on the leaves, and

*N. L. Alcock (Kew Bull. Miscl. Inf., 1918) reports the occurrences of black-spot on canes of the following varieties in England: Mme. Ravary, La Tosca, Mrs. David Jardine, Gruss an Teplitz—all Hybrid Teas; also Juliet, an Austrian Brier-Tea hybrid. In the United States, L. W. Corbett, in a letter to the senior author, lists as susceptible to stem-infection such soft-wooded varieties as Los Angeles, Mme. Edouard Herriot, Golden Emblem, Rev. F. Page-Roberts, Edel, Etoile de Feu, and Mari Dot; among the climbers, Mme. Sancy de Parabère, Etoile de France, Lady Ashtown, and Roselandia; and in the Hybrid Perpetuals, Paul Neyron, Magna Charta, Ulrich Brunner, and Mrs. John Laing. Succulent, rapid-growing shoots, originating from the bases of the plants late in the season, are commonly and conspicuously affected, although it is not unusual to find minute lesions on stems of plants making less rapid growth.

these summer spores are carried to other leaves, where they infect from either surface and cause additional spots. With the falling of the leaves in the autumn the formation of the winter spore stage in the old leaves on the ground is begun, and the inoculum for initial infection the following spring will be matured about the time the first leaves unfold. Thus the cycle is complete.

Since *Diplocarpon rosæ* is a plant, it is influenced by such factors as temperature and moisture, the same as any other plant. Moisture is essential for the germination of the spores, and it is during rainy weather or when the leaves are wet with dew that infection takes place. It is important to know this, since it is evident that the factor which protects the rose from the disease must operate while the plant is wet. The careful grower will make certain that his roses* never go through a rainy period without a protective coating of fungicide.

Control. In the Annual for 1922 (page 83) the control of this disease is discussed in detail; and since this number of the Annual is doubtless still in the hands of many members, or, if not, may be had from the Secretary, a general discussion will not be entered into here. In the 1922 Annual will be found a statement as to the value of raking and burning the old leaves.

Fungicides. Bordeaux mixture of the 4–4–50 or 5–5–50 strength, and lime-sulphur at the dilution of 1 gallon of the commercial concentrate to 50 gallons of water, are effective sprays for black-spot control. It has been demonstrated, also, that a dust consisting of 90 parts finely ground sulphur and 10 parts arsenate of lead will give as good control as the liquid materials. Since the dust is easier to apply and causes less discoloration to the foliage, its use has been preferred by many to either Bordeaux mixture or lime-sulphur. Somewhat recently, at the senior

*All groups of roses are susceptible to black-spot. The Austrian Briers and Polyanthas are considered by the writers to be most susceptible, with the Pernetianas scarcely less severely attacked. The susceptibility of the Hybrid Teas and Hybrid Perpetuals is well known. Doubtless, varieties differ in degree of susceptibility but it is difficult to classify them within groups on this basis, as determined by observations, since the factor of klendusity (disease escape) varies with the season, locality, and even with the location in the garden. Some of the species roses, such as *Rosa spinosissima*, are very susceptible. The Rugosas and Mosses may come further down in the list, but even these are often rather severely spotted, and none of the varieties stands out as being free from the disease. There is a general opinion that the climbing roses are not as severely affected by black-spot as the bush roses. This may be true, but it is also true that all of the varieties that we have observed are susceptible to some degree, and in some instances climbers have been found to be as badly defoliated as any of the Hybrid Teas or Hybrid Perpetuals.

writer's suggestion, the Niagara Sprayer Company, of Middleport, N. Y., prepared a *green* sulphur dust which in tests to date has proved as effective as the uncolored material, and which has the advantage of being inconspicuous on the foliage.

In tests made with ammoniacal copper carbonate, it was found inferior to either lime-sulphur or Bordeaux mixture, for which it has frequently been recommended as a substitute in the control of black-spot. If there is a spray material as effective as Bordeaux, which will not discolor the foliage, with superior qualities proved by thorough tests, it is unknown to the writers.

This past year there was placed in our hands for testing a new colloidal copper paste which was developed by Dr. Frank Wilcoxon, working on a fellowship with the Crop Protection Institute. The junior author conducted comparative tests for the control of black-spot in the Rose-test gardens of Cornell University, using, under identical conditions, this new copper paste, Kolotex (a 90–10 sulphur-lead dust), and copper-lime dust (20 parts copper sulphate and 80 parts lime). Seventeen applications, covering the period from May 5 to September 12, were made with the dusts and fourteen with the spray, the earliest application with the latter material being made on May 23. In each case the plants of Premier roses were dusted in the evening after the dew had fallen, and those sprayed were treated the following morning. An effort was made to apply the materials ahead of the rain periods, of which there were many this past season. The percentage of infection was obtained by actually counting the diseased leaves on each plant, together with the leaf-scars which showed where leaves were lost from premature defoliation. Kolotex and the copper paste were found about equally effective, reducing infection from 60 to 80 per cent on the check plants to less than 12 per cent on the treated ones. The copper-lime dust was less effective. Other varieties in similar tests were more effectively protected by Kolotex and the copper paste than by copper-lime. The Polyanthas proved especially difficult to protect, but, judging by their general appearance, the beds dusted with Kolotex showed much less defoliation than those dusted with copper-lime. The new copper spray turns green shortly after being applied to the plants, so that the foliage is not rendered so unsightly as it is

by the use of Bordeaux mixture. This new material is not yet on the market, it is believed.

In another experiment, two beds of Persian Yellow, which is extremely susceptible to black-spot, were used. One bed was given seventeen applications of Kolotex and the other left as a check. The accompanying photograph (facing page 41) speaks for itself. It was taken on October 1, and shows how successfully proper dusting can prevent defoliation.

The efficiency of a dust fungicide varies directly with its fineness. Ordinary sulphur purchased at drug-stores is too coarse. Sulphur which will pass through a screen of at least 300 mesh is desirable, and a mixture of materials prepared especially for use as a dust should be used.*

The liquid lime-sulphur can be purchased from most farmers' supply stores and seedhouses, and Dry Lime-Sulfur, to be mixed with water and used as a spray, is manufactured by the Sherwin-Williams Company, of Cleveland, Ohio. Bordeaux mixture may be home-mixed, or a prepared paste ready for dilution with water, such as Pyrox, Triangle Brand, Key Brand, Bordo-lead, etc. For small lots, such as the average grower will use, purchasing prepared Bordeaux is probably preferable, even though it may not be quite as effective.

Timeliness. The selection of the proper fungicide, although important, is no more so than correct timing of applications. Many have decided that the material used was at fault when the real difficulty lay in the failure to have the foliage covered and thus protected throughout periods favorable to infection. *From the time of the unfolding of the first leaf-buds until frost, the plants should never go through a rain period without having a protective coating of the fungicide on the leaves.* During the time when the plants are making rapid growth, and during rainy weather, it may be necessary to dust or spray them two or even three times a week. Later in the season, when the plants are not growing so rapidly and rains are less frequent, treatments

*The Niagara Sprayer Company markets, under the name of Kolotex, a 90–10 sulphur-lead mixture containing sulphur in a form which when wet goes into colloidal suspension. It is used as a dust and is superior to most sulphur dusts for many fungi. Its superiority is probably due to the extreme fineness of the colloidal material which not only makes it more active chemically but also increases its adhesiveness.

Small dust-guns, selling for about a dollar, and larger ones of the crank type, may be purchased from most companies selling dusts, or from enterprising seedsmen or dealers in horticultural supplies.

at intervals of a week or ten days may be sufficient. Instead of following an arbitrary schedule, one should keep in mind the necessity of having all parts of the foliage covered with fungicide at the beginning of each rain period. If rains have removed the previous covering, and if new leaves have developed or the old leaves increased in size since the last treatment was made, spray or dust again; and, *in case of doubt, make an application to be safe.* If unsuccessful in preventing initial infection, so that the fungus becomes established on plants in the garden, the difficulty of preventing secondary infections is increased.

Thoroughness. It is necessary that all parts of the foliage be covered. If dusting, it is not necessary to use so much material as to discolor the foliage greatly; but dust from all sides of the plant, and see that all of the foliage, both upper and lower surfaces, is covered. The best time to dust is early in the morning, or in the evening, when the air is quiet. It is not necessary for the leaves to be wet in the case of sulphur dusts, but desirable in the case of copper-lime dust. Plenty of the sulphur dust will adhere to a dry leaf to protect it.

In spraying, use a nozzle that will give a fine mist, and have plenty of pressure—the more the better. It should be unnecessary to spray until the material drips from the leaves. Sprays should have time to dry on the foliage before the plants enter rain periods. Spraying in the middle of the day, in hot, muggy weather, may result in injury to the foliage, especially if drenched. The danger of burning of drenched foliage will be lessened by knocking the adhering drops of fungicide from the leaves by tapping them with a stick. There is less danger from sulphur dusts than from Bordeaux mixture or lime-sulphur.

Black-spot and Winter Injury. The control of black-spot has a direct relation to winter-killing. Plants prematurely defoliated will be stimulated to increased vegetative growth in the late summer and autumn in an attempt to develop a new set of leaves. Thus the normal maturing of the tissues is retarded, and the plants enter the winter with decreased resistance to low temperatures. The control of black-spot is thus more than a mere matter of correcting the unsightliness brought about by the spotting of the leaves and by defoliation.

A Plea for Patience

By P. L. A. LINES, Seattle, Wash.

TIME and again has the writer heard or read of roses being described as useless, only to find later that many were better than some existing favorites. One has only to read the contradictory statements (and often likes and dislikes only, I am afraid) of growers from the same zones, where the characteristics or behavior of the rose in question should at least be similar.

A rose cannot be judged in less than three to four years after its introduction into this country from Europe, and *rebudded where it is to stay for at least two years, and better for three or four.* The U. S. Department of Agriculture will not allow entry of any but small plants (why, is still a mystery to me), and when the best are denied us, and these are immediately cut to pieces for budwood, overpropagated, and forced, how can we expect to get good results from the plants that are first put on the market?

It seems to me that the growers in Europe who produce those wonderful roses (or descriptions of them) and those men (our greatest authorities) who award all those gold and silver medals cannot all be wrong in their judgment and descriptions. Yet the majority of gold and silver medal and certificate-of-merit roses of recent years have apparently been discarded. Look at poor old John Russell, or rather, look at the wonderfully beautiful colored illustration of it in the National Rose Society's Annual for 1925—yet who grows it here? Many have tried it and discarded it. Now, is that illustration a fake or was it an accident? The writer thinks *not*, and has sufficient confidence in the men at the head of rose affairs in Europe to continue trying to get some blooms like it.

I join with many dissatisfied rose-lovers in this country and abroad in deploring the production of so many highly lauded, thin-petaled and floppy, non-substance roses. We seem to be getting farther and farther away from the ideal type of bloom, and the sooner some concerted action is taken the sooner will we be getting what we desire.

When Is a New Rose a Good Rose?

By THE EDITOR

IT WOULD be, perhaps, a better procedure if it were assumed that I am writing a play, in which case I would recite the *time* as any spring before roses are bought; the *place* as any home where roses are loved and annually planted; and the *circumstances* and *furnishings* as including the consideration by the Chief Character, a purchaser of roses, of several rose catalogues, and indeed and alas, of most of the recent issues of the American Rose Annual.

The Chief Character would be wanting to buy some roses, and catalogues are the things roses are bought from. Wherefore, they would be at hand, as I have said. But being a member of the American Rose Society, this Chief Character would want to buy intelligently, and he (or more probably she) would be reading about the annual awards at Bagatelle and the gold medals given by the National Rose Society of England, the greatest rose organization on earth. Moralize as we please, there is a glitter and a glamour and an attraction about this award and medal game which seems to shut off almost completely, while the glitter persists, any reflection from the less conspicuous virtue of common sense.

Well, this Chief Character would be reading about what roses got the gold medal at the English Show particularly, if we may temporarily disregard the Bagatelle award. There wouldn't be any lack of language in the descriptions of the roses brought into America the year before by the enterprising dealer and propagator. But if the buyer is as willing to assert temporarily subordinated common sense as I am beginning to be, he will inquire, as I am inquiring, what is back of this gold medal stunt, and even more pointedly ask the question which is the title of this article.

The process of competing for a gold medal in the English Society seems to be, stated as briefly as possible, that the seedlings are submitted by the competitors to the New Seedling Rose Committee of the National Rose Society which, in the language of our good friend, Courtney Page, the Honorable Secretary of

the National Rose Society of England, requires "an exhibitor to stage not less than six blooms or trusses, with a plant from the open ground, in order that the Committee may make a thorough examination. Then, when a rose examined receives seventy-five per cent of the votes of the Committee, it is given a Gold Medal, and to a variety that is not considered up to that standard, a Certificate of Merit may be awarded, which is understood to mean that the Committee would like to see the rose again at a future date."

Thus, a new variety must show six flowers and "a plant from the open ground." There is nothing in these requirements to indicate that the plant must have been in the open ground for a whole season, or be other than a "maiden,"or that the six flowers have been cut in the open. The judgment of the experts seems to be on precisely what they see. Consequently, such things come through as the official description of the now well-known Angèle Pernet, printed on page 178 of the 1926 Annual, the plant of which is said to be "vigorous, branching, with very beautiful bright, glossy green foliage, quite free of mildew and black-spot."

Wouldn't that "jar" any poor "dub" who has bought that rose since, and while gazing entranced on the occasional (alas, far too occasional!) bloom it provides, has "cussed out" its mean growth and its pitiful, sparse foliage, always coaxing to be black-spotted? But yet there can be no doubt as to the honesty and truthfulness of the statements made on the facts which were before the judging committee.

That this condition is anything but satisfactory has appeared on the other side of the world in a most vigorous letter written by Mr. H. H. Hazlewood, our valued correspondent, to the December "Special Spring Show Number" of *The Home Gardener* of Melbourne, Australia. He is crossing swords with a critic who takes issue with his attitude on new varieties, Mr. Hazlewood insisting that the gold medal means just about nothing for garden usefulness. He calls attention to the fact that the medal-winners, "quite hopeless outside their own particular home climate," are frequently "inferior to varieties like Etoile de Hollande, Mme. Butterfly, Mme. Abel Chatenay, Frau Karl Druschki, General MacArthur, and Ophelia . . . not one of

which has ever received a gold medal from the world's leading rose society." Mr. Hazlewood brings to his support Mr. G. M. Taylor, a Scotch rose expert who is intimately related to the National Rose Society of England, and that support includes a vigorous plea for a rose-garden maintained by the National Rose Society in which there can be honest outdoor judgment over a reasonable period of time as to the value of the roses to be recommended.

But Mr. Hazlewood doesn't stop with Mr. Taylor. He brings to his aid Mr. Courtney Page himself, than whom the world knows no more important and acquainted rose critic. He notes, from Mr. Page's article in the 1927 English Rose Annual in support of a preference for a sort of Super-Gold Medal or special award, which might give the ordinary amateur a real look-in, as follows:

> Perhaps one day we may be fortunate enough to see all the new productions that have received or are staged for an award growing under just ordinary conditions. Their true relative value could then be arrived at with greater certainty, and any variety thought worthy could receive a special award. The award of the Gold Medal or Certificate of Merit would not be interfered with in any way whatever, but the present procedure would be continued. The special award would hallmark a particular variety as a super-rose, one that would, amongst its other good points, be known to do well under ordinary general garden conditions.

Again, Mr. Hazlewood brings Mr. Page as his witness from the same Annual in the following quotation:

> It is always very difficult to gauge the actual value of any new variety until it has been in commerce for some considerable time. This is where the value of a trial garden would come in. Raisers of new varieties would then be able to send their new productions, which could be to a certain extent tested and tried under the supervision of experts. The Society's Gold Medal could still be awarded, to encourage the raiser, but a new production which had gone under a fair trial and proved to be satisfactory, could be eligible to receive a special or secondary award. The public would be saved a deal of disappointment, and raisers would be sure of their new productions receiving the most careful and watchful consideration of a committee of experts. Varieties that received the special or secondary award would be purchased with confidence by the general public, and in course of time those varieties which had been, so to speak, hallmarked, would be the varieties of the day, quickly eliminating from the catalogues those of a doubtful or freakish nature.

Mr. Hazlewood also insists that Mr. Page's suggestion has "robbed the gold medal of all of its value," and then he gives us this delightful bit of sarcasm:

May I ask readers of *The Home Gardener* to imagine themselves present at a meeting of the National Rose Society in London? The Chairman is speaking: "Ladies and gentlemen, it is now my very great privilege to present to Mr. Polleniser the Gold Medal awarded by this great Society for his new seedling rose, Imperfecta. Most of you are aware what a ticklish and uncertain job is the cross-fertilization of roses, but Mr. Polleniser has mastered the art, and has been successful in producing six blooms and one plant of his seedling, which were exhibited at a recent show. In the name of twenty thousand members of this Society, which includes the greatest rosarians in the world, our judges have declared the variety worthy of a Gold Medal. It is quite true our worthy judges have not seen how the plants will behave in winter, or how they will stand as 'cut backs.' It is also true they do not know how the blooms will stand wet weather or hot sun, nor can they form much idea of the number of blooms the variety will produce, or its disease-resistant qualities. Still, in your name, they have awarded it the highest honour this Society can bestow. It is admitted that it is possible (like a number in the past) that this variety may prove of a doubtful or freakish nature, and it may be discarded by the bulk of English nurserymen in a very few years. Nevertheless, may I express the hope that you will be able to send six plants to the Society's garden at Hayward's Heath for a two-years' practical test? Should it survive this ordeal, I trust you will be successful in winning the Society's secondary award, which will indicate to the rose-growing public that it may be purchased with every confidence. Just at present it has not been decided what form this second award will take, but whether of silver, bronze, brass, lead, or leather, it will in no way reflect on the value of the Gold Medal now presented you. I now ask you to accept this prize, presented by way of encouragement, and trust you may live long and produce many more roses of equal value to Imperfecta."

Who among the patient and persistent American rose amateurs has not had experiences to warrant these strictures from far-away Australia? We cannot doubt the sincerity of our friends who sell the roses, even though that sincerity is not infrequently misplaced. A certain exceedingly prominent rose which sold actively at a Philadelphia show several years ago at $5 per plant is now disappointing those who purchased it, because it simply doesn't bloom. I was one who joined in the sensation this rose created, and I recommended it highly on the strength of its first performance. I was wrong. I should have cast my critical eye rather than my eye of enthusiasm for much longer than that first performance, and have inquired what it would do during the summer and the fall and the next spring.

Now I do not find myself able to answer the question of the title, "When is a New Rose a Good Rose?" save by saying that it is a good rose when it has proved itself in at least two or three of the half-dozen or more separate, specific rose climates of America to be worthy and reasonably dependable.

PLATE V. Black-spot lesions on stems of Los Angeles

See Prof. Massey's article, page 31

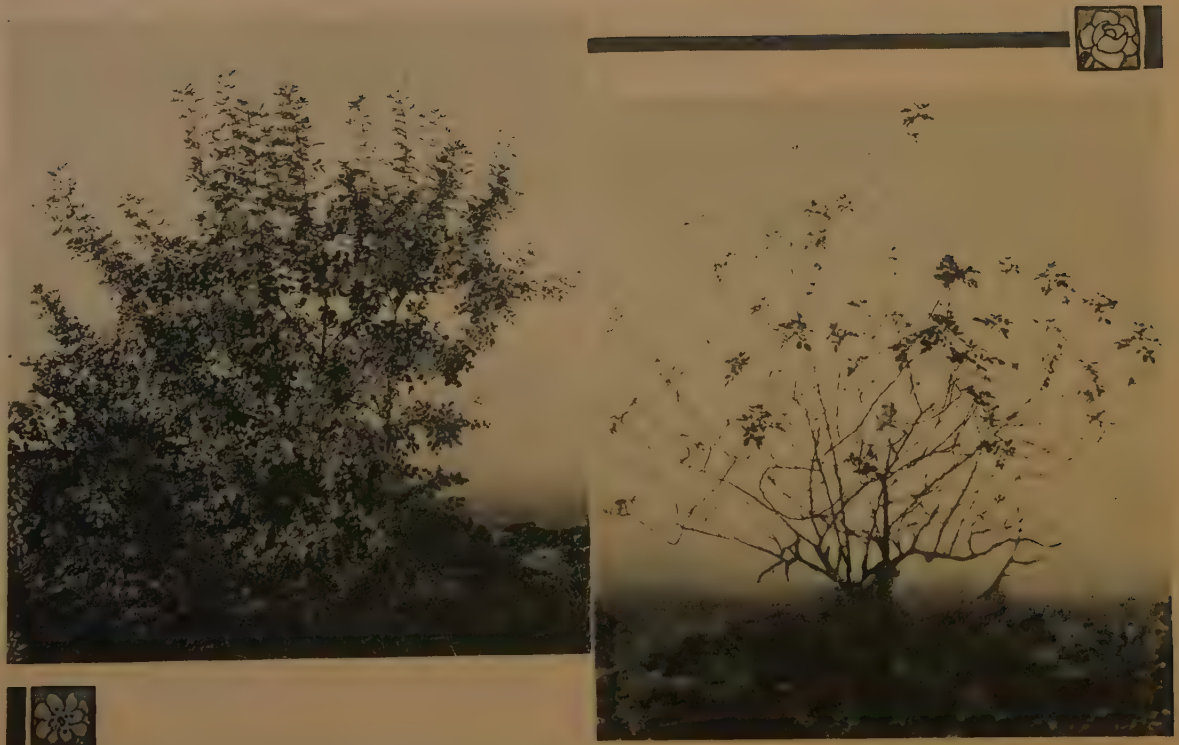


PLATE VI. Sulphur dust used as directed will control black-spot and prevent defoliation

Two plants of Persian Yellow, the one on the left dusted throughout the past season with 90–10 sulphur-lead dust; the other untreated

See Prof. Massey's article, page 31

Favorite Roses

A SYMPOSIUM

Summary by G. A. STEVENS

FOR the past several years there has been a very spirited protest against the results of the referendums which selected the American Rose Society's "preferred dozen," or "favorite dozen" roses. These protests came not only from amateurs whose attitude was best expressed in "The Static Referendum," by R. Marion Hatton, in last year's Annual, but also in conversations and letters from various nurserymen, one of whom referred to the "preferred dozen" as the "ridiculous dozen."

The Editor's office consequently endeavored to obtain opinions from a large number of people who were known to have a wide acquaintance with many varieties of roses, and more than ordinary skill in growing them. These members were asked to tell what roses they liked the best, and why. They were specifically told not to include what they considered the "best roses" for themselves or for anyone else to grow, but to state quite frankly what varieties gave them the most pleasure; because it is a very important fact that many roses, inferior in certain fundamental respects, have qualities which commend them to people of different tastes, and such roses are certainly worth growing by the people who like them. The following articles thoroughly explain themselves and leave no doubt that the 24 experts consulted had little sympathy with the twelve roses heretofore called the American Rose Society's "preferred dozen."

I thought it would be interesting to discover which roses appeared the most times in these favorite lists, realizing, of course, that it was a very dangerous undertaking to attempt to convert this very informal symposium into a referendum, particularly since the reports came from such widely separated localities. Nevertheless, in reading over the articles it was evident that a limited number of roses were more highly regarded than others, so it seemed worth the trouble to find out just which roses they were. In consequence, three lists were prepared, the first including those roses which were spoken of in

the highest possible terms of admiration; the second, those roses which were mentioned as good, but not with any particular enthusiasm; and third, those roses which were definitely stated to have serious defects which would warrant their being discarded from the garden of the person reporting.

Altogether, 272 roses were reported upon. Those which were mentioned only once in any way have been disregarded. In what I call List No. 1, 22 roses were praised by three or more people. These roses follow, with the number of times they were mentioned indicated.

Etoile de Hollande	9	Radiance	3
Rev. F. Page-Roberts	9	William F. Dreer	3
Betty Uprichard	7	Souvenir de George Beckwith	3
Souvenir de Georges Pernet	5	Souvenir de Claudius Pernet	3
Lady Margaret Stewart	5	Margaret McGredy	3
Gruss an Teplitz	5	Lord Charlemont	3
Mme. Edouard Herriot	4	Jonkheer J. L. Mock	3
Mme. Butterfly	4	Georg Arends	3
Gloire de Chédane-Guinoisseau	4	Frau Karl Druschki	3
Mrs. Henry Morse	3	Dame Edith Helen	3
Mrs. Charles Bell	3	Clio	3

The first three roses among those which received what we may call three "votes," Mrs. Henry Morse, Mrs. Charles Bell, and Radiance, also were prominent in List 2, Morse receiving four votes, and Bell and Radiance each three. This would indicate that they should be given a little higher standing than those which merely received the three favorite votes. List No. 2 includes:

Willowmere	4	Mrs. Charles Bell	3
Mme. Jules Bouché	4	Radiance	3
Mrs. A. R. Barraclough	4	Isobel	3
Los Angeles	4	Feu Joseph Looymans	3
Wilhelm Kordes	4	Paul's Scarlet Climber	3
Mrs. Henry Morse	4	Red Radiance	3

Amongst those recommended for discard from individual gardens appear:

Etoile de Hollande	Golden Emblem
Souvenir de Claudius Pernet	Hoosier Beauty
Dame Edith Helen	Lady Florence Stronge
Radiance	Lord Lambourne
Roselandia	Maman Cochets (white and pink)
Bessie Chaplin	

This list, too, is both interesting and instructive, because in it appear such well-known war-horses as Etoile de Hollande,

Radiance, and Maman Cochet—roses which are definitely known to be among the best of their classes and general favorites with many. It cannot be interpreted, therefore, as having any value whatever outside of the individual garden from which each report was made, and can quite safely be disregarded in making up our ideal list.

These statistics are, of course, in no way conclusive. If it were worth the bother, and I had the time, I could make sectional separations, yet in one case where I tried that, I found that the experiences of the two people reporting from the same district did not run parallel at all. So it seemed best to extend this tentative grouping to the widest possible breadth, giving us in a broad, general way, a notion of what roses meet the approval with those people who grow a great many roses well.

To make up a list of twelve "favorite roses," I dropped Gruss an Teplitz, which is not a Hybrid Tea, and Gloire de Chédane-Guinoisseau, a Hybrid Perpetual, both gorgeous roses which deserve their places, but do not fit with the others. Picking up the first two from the second list to replace them,* the twelve "favorite roses" selected by "experts" are as follows:

Etoile de Hollande
Rev. F. Page-Roberts
Betty Uprichard
Souvenir de Georges Pernet
Lady Margaret Stewart
Mme. Edouard Herriot
Mme. Butterfly
Mrs. Henry Morse
Mrs. Charles Bell
Radiance
Willowmere
Mme. Jules Bouché

and, without being asked, I claim it is a pretty fine dozen!

*Of course, this is not strictly according to Hoyle. I should have picked up Wm. F. Dreer and Souvenir de George Beckwith from List 1. But I like Willowmere and Mme. Jules Bouché better, and since my choice is not included in the 24 reports collated, it seems a good chance to exercise it here.—G. A. S.

"All Roses Are Beautiful"

By DR. GEORGE T. ELLIOT, East Otisfield, Maine

EDITOR'S NOTE.—To numerous inquiries from residents of the state of Maine, the Editor has had occasion time after time to refer to Dr. Elliot's experiences reported in the Annual year by year. The surest way to silence those who claim that nothing but Rugosas, Mosses, and the hard-luck sorts can be grown in a climate where the thermometer drops to 50° below zero at times is to refer them to Dr. Elliot's account of his favorites.

"WHAT roses do you like best, and why," asks our esteemed Editor. A very comprehensive question, but easily answered, as I can frankly say: "No one rose best, but all roses!" All have a beauty of one kind or another. That is certainly very evident in last year's "Proof of the Pudding," where praise or condemnation was freely bestowed on any rose according to the section of the country reporting. So I will mention only those which flourish and do their best in my small garden in the very difficult and trying climate of Maine.

For instance, among the older roses, Jonkheer J. L. Mock never balls here but blooms freely all season, flaunting its exquisite shades of color until frost sends it to sleep. On the other hand, Radiance balls frequently, is stingy with its blooms, and dies to the ground every winter, no matter how well protected. Lieutenant Chauré is most hardy, lovely in color, form and perfume, and never balls, though at times, in wet weather, it blues. It can serve as a good object lesson to Francis Scott Key, whose special mission in life seems to be to ball and disappoint. A very lovely dark red and most hardy rose is Crimson Chatenay, and the same may be said of Crimson Emblem, with its delicious perfume. A very charming red, and also very hardy, is His Majesty, sometimes called the "Red Druschki," while Captain F. Bald, Nederland, and K. of K. all possess individual features of beauty and attractiveness. Clarice Goodacre, in bud and half-open, is most exquisite in form and creamy color; Noblesse, with cup-shaped bloom, the center showing delicate pastel shades of pink, is most lovely, and so may many more of the older roses be mentioned, finding certain virtues in each which more than justify their existence.

Among more recent productions, I would certainly give a

front-row seat to Souvenir de Georges Pernet, of deep salmon-pink, lovely form, and lasting bloom; also to Souvenir de George Beckwith, salmon-pink, too, but of a lighter shade and a very free bloomer. As far as perfume is concerned, I know of none to excel Friedrichsruh or Gruss an Teplitz. Both are continuously in bloom, also. What a pity Souvenir de Claudius Pernet is spoiled by its unsightly black center, but it will not be missed when replaced by Julien Potin or Mrs. E. P. Thom. Both of these are lovely in color and form, with abundant dark green foliage and good, stiff stems. Los Angeles is, of course, beautiful, but winter-kills here, and can be most satisfactorily replaced by Willowmere. Betty Uprichard gives much greater pleasure to the eye than any other two-toned colored rose, while Imperial Potentate stands out most distinctly in form and color against a background of dark green cedars forming a hedge. Etoile de Hollande is a gorgeous red, certainly, but somehow leaves me cold. I much prefer the more cheery shades of Patience and Theresa Morley. Both of these seem warmer, less aloof, and offer all the charms of form and blooming qualities one can ask for. The beauty of Golden Emblem is well recognized, but I prefer Mrs. Beatty. In bud and half-open the latter is exquisite; it holds its rich yellow color well, only fading slightly. It could have a few more petals, but it makes up for that in abundance of bloom and delicious odor. Marion Cran and Constance Casson are attractive, sort of harlequin things, due to their bizarre coloring, but Rev. F. Page-Roberts is a joy, and Mrs. Henry Bowles also. Dame Edith Helen is very attractive for its form, its fresh pink color, good erect stems, and lasting qualities. I have found its best blooms to be in the autumn.

But why should I continue the list, which would only be more or less a repetition, since while it may be said that in general all roses have beauty, still each variety has a special beauty of its own? It may be form, or shape, or color, or perfume, or general habit of growth, or a blending of all in such an indescribable way that can be expressed only by one word—*beautiful*. Many different points of view and many different individual tastes naturally must exist, but as far as I am concerned I vote that all roses are beautiful, and play no favorites.

Vermont Replies

By GEORGE P. CHENEY, Windsor, Vt.

EDITOR'S NOTE.—In discussing shade for Roses, Mr. Cheney touches upon the great line of cleavage between those rosarians who grow roses for the flowers and those who grow them for color effect in the garden. Far be it from us to attempt to say which ambition is more laudable, but one person certainly cannot do both, unless he has two gardens or at least a separate section where his specimen blooms can receive the necessary encouragement.

"WHAT roses do I like the best?" I will tell you gladly, frankly, and without reserve: *All* of them, when they are at their best! Of course, some varieties have from time to time shown up poorly and have been weeded out, so that, today, my garden of 500 plants and 50 kinds gives me entire satisfaction.

There has been no serious defect found in Grange Colombe, an old-timer, to be sure, but, with me, it has not been surpassed by any other rose, new or old, in grace and beauty of form, and in lavish productiveness. What if the color does not stand out vividly like the reds! We don't want them all vivid in color, do we? I get plenty of thrill looking at its wonderful deep cream interior. It is a fine rose for cutting, and the bud lasts a long time before opening.

For a red rose, Etoile de Hollande is a prize. Fragrant, productive, inspiring, marvelous! If I could afford it, I'd plant a hundred of this variety. The effect would be dazzling. One never tires of it.

Charles K. Douglas is a mighty good red, too. For cutting it is perhaps a little better than Etoile de Hollande.

Souv. de H. A. Verschuren comes close to the top as a buff-yellow, blooms well, and is of good form. I love the coppery scarlet of Padre, the clear salmon-pink of Mrs. Charles Bell, Roselandia's yellow, and that of Rev. F. Page-Roberts, too, with its markings of red.

But can you tell me anything more entrancing to look upon than that delightful rose, Mrs. Henry Morse? Working in my garden in the early morning, when everything is fresh and clean, I have seen this charming variety loaded with perfect flowers of two-tone pink. Gazing upon its loveliness, I am moved to assign it first place, but, looking along a little distance, I spy a

formidable rival that makes me waver, and, turning a corner, we come upon another beauty that seems to "knock 'em all cold." Impossible to choose!

I recommend William R. Smith very highly. This pure Tea rose possesses to a remarkable degree, hardiness, immunity to black-spot and mildew, free-blooming qualities, handsome creamy white buds tinged with pink, and an exquisite, velvety texture. Feu Joseph Looymans has aroused my lively interest. It seems to be a good plant, with handsome gold-orange buds.

It would be unpardonable not to mention the gorgeous display easily obtained in our gardens by allowing the Hybrid Perpetuals, Frau Karl Druschki, Paul Neyron, Clio, and Mrs. John Laing, to grow to a height of 8 feet, wintering the canes full length, and fastening them in the spring to an inconspicuous iron trellis made of two 22-foot rods, ⅜ inch in diameter, bent in the center like a hairpin, and sunk in the ground about 4 feet. (I think this is the best support ever devised for tall-growing plants.) Feed them well, and watch results. They will yield a mass of bloom, to me more attractive than the ramblers.

Paul Neyron has a blossom 6 inches across, and sometimes the color rivals that of the old American Beauty. Everyone knows what Druschki will do. If this rose bloomed all summer as it does in June, wouldn't we acclaim it the very best of all? I think so.

The matter of shade for our rose-gardens should receive more attention. It is of prime importance. In open, exposed situations, plants should be protected from hot sun and drying winds, if we would have them produce perfect roses. But how to protect is the question; artificial shade in many gardens is impracticable, unsightly—spoils the scenery. There is one method of protection one can employ if the "scenery" doesn't matter much to him, and that is: Erect a tobacco-cloth tent over the beds, just the same as tobacco-growers do. You'll marvel at the improvement in all roses grown under it, especially such varieties as Etoile de France, Columbia, Commonwealth, and others that open poorly or do not hold their color well. Old Sol is pretty hot in summer, withering and fading the delicate colorings. Our roses cry out for shade and protection from high winds. Given it, they will improve 100 per cent.

A Well-Considered List

By R. MARION HATTON, Meshanticut Park, R. I.

EDITOR'S NOTE.—Mr. Hatton knows whereof he speaks. We had the pleasure of showing him around Breeze Hill last June, and later his charming garden, near Providence, came under our somewhat critical eye. All the roses he mentions were growing there, in a fashion to justify what he says about them. Study his list and one will not wonder that he complained in the Annual last year about "static" in the Referendum!

I FIND so many good things among the new roses, each season, that a list of my favorites is subject to frequent revision. However, at the end of the 1928 season, my preferences stood in about the following order.

Etoile de Hollande is the rose of roses to me; a great, big, loose fellow of velvety crimson, with a fragrance that is satisfying; just free enough with its lovely blooms to keep us wishing for more, and a healthy and hardy plant.

Mrs. Dunlop Best has second place because of its daintiness. The well-shaped, reddish apricot blooms appeal to me, and the shiny red-bronze foliage on slender, ruddy canes, makes a really beautiful plant.

Joseph Hill is third for the sheer beauty of the flower, as the plant is miserable; if someone would only duplicate the flower on a healthy plant!

Souvenir de Georges Pernet is beautiful all the way from bud to open flower. It is immense without being coarse, and is very generous.

Château de Clos Vougeot is still supreme of its type. *Rotelfe* and *Friedrichsruh* are somewhat similar, give many more blooms on better plants, but the velvety blackness and delicious fragrance of Vougeot have never been equaled.

Pink Pearl's unusual fragrance would give it a place, but it is also beautiful, very free-blooming, and the finest rose of the Columbia type.

Mme. Butterfly also nears perfection; the dainty shades please almost everyone, the shape is always good, and it is very free-flowering.

Souvenir de F. Bohé is unique. I have never seen two of the enormous, semi-double blooms alike; each one is a surprise in either size, shape, or tint, and there are lots of them on a strong, healthy plant.

Patience pleases me in every way. The carmine buds are unusually attractive and the open flower distinct, fragrant, and free.

Julien Potin is golden perfection. The long buds show color for several days, and after opening last a long time, fading but little; also, it is sweetly fragrant, a rare quality in a yellow rose.

Miss Willmott is chaste as a lily; the faint flush of pink in the heart of the half-opened bloom enhances, rather than detracts, from her beauty.

Isobel. Although single, the enormous petals, with their mingled shades of carmine, red, and orange, make a plant of Isobel, in bloom, a beautiful sight, and the manner in which the petals fold up after sundown is also delightful.

Angèle Pernet "belongs," for its distinct color and sweet fragrance. The plant is poor but the brownish apricot flowers are exquisite.

Souvenir de H. A. Verschuren has almost everything a rose needs—lovely shape, substance, attractive color which fades but little, long keeping qualities, and delicious fragrance.

Gaiety's orange, Indian red, and silver are so blended that the rose is lovely all the time. It is unusually free-blooming and the plant is good.

Miss C. E. van Rossem is one of the first and one of the last to bloom, and there is scarcely a day in between when a healthy plant will not have some flowers. While small, the blooms are of nice shape, and the dark red color wears well.

Reine Marguerite d'Italie, one of the most reliable of roses, has a large, double, red flower of good shape and fragrance. Healthy and blooms all the time.

Betty Uprichard scores close to 100 as a garden rose. The contrast of carmine and rosy salmon is attractive. It is a strong grower and free bloomer.

Lady Margaret Stewart has beauty of form, color, and delicious fragrance. It is the darkest of the yellow family and so good that it doesn't have to bloom freely.

Barbara Robinson has beautiful yellow buds, opening to a creamy white flower of splendid shape and fragrance. Barbara is very lovable.

Margaret McGredy's oriental red blooms are different. They are "rich-looking" and the fragrance is delightful. I cannot get enough of them.

Lord Charlemont wins on beauty. The blooms are perfect in shape, and the velvety color lasts. Each is borne on a long stem and is fragrant.

K. of K. among the Hybrid Teas is like Paul's Scarlet Climber among the climbers—one can see it a mile. Closer inspection shows each petal resembling a piece of fine scarlet velvet.

Pink Beauty has a place in my heart for its rare charm. The blooms are cupped, of a satiny pink which glows like a bed of hot coals when the sun shines into the cup. It is very fragrant and the plant is good.

Shot Silk is one of the few Hybrid Teas attractive as plants. The foliage is a rich glossy dark green and is healthy. The flowers are very fragrant.

If I could have but a dozen Hybrid Perpetuals, they would be—

Jubilee, the darkest, sweetest rose of all, every bloom perfect and each petal like a piece of dark red velvet with a blackish sheen.

Commandeur Jules Gravereaux's clear, red blooms please me greatly. It is fragrant and remontant.

Gloire de Chédane-Guinoisseau, a deep crimson rose of real quality, has an unusually good plant.

George Dickson is not always good but one perfect bloom would pay for a year's waiting.

Georg Arend's soft pink has never been duplicated. The blooms are perfect in shape, enormous in size, and sweetly fragrant.

Frau Karl Druschki appeals because of its size and the pure whiteness of the open flower.

Fisher Holmes wins a place on sheer beauty. Smaller than most of the Hybrid Perpetuals, it is the brightest.

Mme. Albert Barbier is a gem. The yellow, white, and pale pink blend so that the inside of a half-opened bloom has the iridescence of a pearl. It is practically an everbloomer, but I would want it if it were not.

Ulrich Brunner's plant is symmetrical, and the cherry-red, fragrant flowers would be missed if I did not have them.

Mrs. John Laing I can't help liking because there are almost always some flowers, and no thorns to bother.

Henry Nevard I am fond of because it is a good everblooming red rose on a Hybrid Perpetual plant.

Prince Camille de Rohan I like for much the same reasons that I like Jubilee, which it greatly resembles.

Of the Polyanthas I like—

Eblouissant for its lovely little dark red flowers, but principally because it is really dwarf—the plant is the smallest Polyantha I have seen.

Chatillon for its wonderful trusses of bloom which remain in good condition for weeks.

Superba for its rich color and free-blooming qualities.

Ideal because it is the darkest of all.

Tip-Top because it is different—the open flowers look like balls of pink and white pop-corn.

Golden Salmon for its "noise"—a bed of this variety shows up like a bed of geraniums.

Among the climbers, the following are my favorites:

Black Boy (Cl. HT.). Although this Australian climber must be protected in winter in this section, it is worth the trouble, and is my favorite climbing rose. It has a large scarlet flower with black shadings, each one beautiful and very fragrant. The plant is healthy and vigorous and blooms over a long period.

Gloire de Dijon (Cl. T.) has second place for its beautiful, old-fashioned flowers, delicious Tea fragrance, and the fact that it is never out of bloom until frost stops it. In a sheltered position it is hardy without covering.

Zephirine Drouhin (Cl. Bourbon) has beautiful soft pink blooms with a fragrance all its own on a healthy plant which blooms for several weeks.

Mary Wallace (HW.) combines beauty of flower with such hardiness of plant that it can be used either as a large shrub or moderate climber.

Aviateur Blériot (HW.) pleases for its delicious magnolia fragrance, and its long, flexible canes covered with small, shiny foliage, lasting well into the winter.

Léontine Gervais (HW.) has all the virtues of Aviateur Blériot, with different perfume. I find it hard to decide which I like best.

Paul's Scarlet Climber (HW.) I like for its long lasting brightness.

Dr. Huey (HW.) is a favorite because it is the darkest of all and the flowers last so long in good condition.

Dr. W. Van Fleet (HW.) for its daintiness and strong growth.

Evangeline (HW.) for its delightful fragrance which perfumes the air for quite a distance from the plant.

Bishop Darlington (Cl. HT.) for its beauty, fragrance, and perpetual blooming.

Wichmoss (Cl. Moss) for the lovely mossy buds.

Of miscellaneous roses I am especially fond of—

Gruss an Teplitz (H. Bengal). Although the stems are weak and the flowers hang their heads, the velvet of the petals and its sweet fragrance endear it.

Austrian Copper (AB.) for its beauty. A plant in full bloom is a wonderful sight—on one of my plants part of the flowers are pure yellow, the rest, the regular copper and yellow.

Souv. de la Malmaison (Bourbon) for its pale beauty and peculiar fragrance —we have nothing like it among the modern roses.

Comtesse du Cayla (China) for its beautiful plant with fine canes and small foliage and the coppery orange flowers which are different.

Hugonis (Species) is a beautiful shrub twelve months in the year, and a plant in full bloom, in May, is something to remember. I also like its distinct fragrance.

Rosa ecæ (Species) pleases me for the beauty of its red canes and wide thorns, and the fragrance of the foliage.

A Nurseryman's Selection

By S. ROGER MITCHELL, White Plains, N. Y.

EDITOR'S NOTE.—Those of us who have been so fortunate as to be shown over the testing-beds at The Rose Farm by Mr. Mitchell can appreciate the careful thought and keen judgment which he so conservatively expresses. We know of no more understanding and sympathetic student of roses than Mr. Mitchell and we heartily commend the observations he has written. His account of certain very new roses is extremely valuable.

I HAVE pleasure in submitting a list of the roses I like best. All of them are comparatively hardy in this section, with good growth and foliage. Therefore, I mention only the other special reasons why I like each one.

Abol. Well-shaped buds and flowers, with a delicious perfume, a quality rare in white roses.

Albertine. This Wichuraiana climber is a strong grower with fine foliage and a beautiful, distinct color—coppery pink with inside of petals tending to coppery chamois.

Betty Uprichard. Reliable all-season bloomer, and a fine color; of upright growth.

Charles P. Kilham. Have not tested this very long but it seems reliable. Its chief distinction is its wonderful color, starting as brilliant orange-orient-red, it develops to a brilliant Lincoln pink.*

Christine Wright. Another climber; has large, cup-shaped, double flowers of wild-rose-pink, and a particularly long season of bloom, often giving some flowers quite late in the season.

Dainty Bess. A delicious, single variety, with delicate salmon-pink petals, a darker pink center, and prominent golden stamens.

Dr. Huey. A climber which is a midseason bloomer, giving a wonderfully profuse display of magnificent, semi-double flowers of rich deep crimson shaded black, with yellow anthers.

Eldorado. The most reliable yellow rose I know. It has good color, upright growth, and is a constant bloomer.

Etoile de Hollande. The best dark red rose. Has beautiful, lasting color, well-shaped flowers, and is a very constant bloomer.

Golden Gleam. Clear golden yellow flowers, only medium in size, but produced with the greatest profusion.

Golden Salmon. A most wonderful new color in the Polyantha tribe—vivid golden salmon.

Hawlmark Crimson. Beautiful, really dark crimson and a very constant bloomer. If it had a few more petals, it would be perfect.

Isobel. One of the most attractive singles, with exquisite buds, opening to beautifully clear, pink flowers.

John Cook. In color just an ordinary, good, light pink, but the profusion of flowers, during the whole season is marvelous, and the foliage is superb.

Killarney Queen. I like this old variety for its charming color, a deep brilliant pink, and for the shape of its flowers, its reliable blooming, and upright growth.

*What are "Lincoln pink," "Lincoln red," and all these special color names with which enthusiasts caress their favorites?—EDITOR.

Lady Margaret Stewart. Did beautifully during the past season; splendid, strong, upright growth, with a profusion of large, beautiful, deep orange-yellow flowers, splashed on the outside with carmine until late in the season.

Mary Pickford. A very cheerful bloomer with only medium-sized flowers, but lots of them, and a good clear orange-yellow.

Mary Wallace. A darker companion to Dr. W. Van Fleet, and possibly not quite such a strong grower, but has exquisite, double flowers on long stems that are good for cutting.

Mme. Anth. Kluis. This Polyantha is a beautiful blend of glowing rose-red, developing into red-salmon; a strong grower and constant bloomer.

Mme. Edouard Herriot. Not always a very vigorous grower but its coral-red and orange buds, developing into moderate-sized flowers of orange-red and salmon, are beautiful.

Mrs. A. R. Waddell. Exquisite and delicate combination of colors; buds gold and copper, developing into flowers of pink and apricot shades. It is a very consistent bloomer.

Mrs. Charles Bell. Magnificent grower and bloomer, with flowers all season.

Mrs. G. A. Wheatcroft. A very satisfactory new variety, constantly in bloom and with perfect foliage. The color is soft salmon-pink with a slight suffusion of copper; inside of petals is silver-rose.

Mrs. Henry Bowles. Reliable growth and blooming, with beautiful flowers of a warm rose-pink, shaded salmon, are the recommendations for this variety.

Mrs. Henry Morse. The remarks about Mrs. Henry Bowles apply to this variety, except that the color is somewhat lighter. Both are delightful and desirable roses.

Mrs. Herbert Stevens. I prefer this to any other white, for its shapely buds, its delicately toned color, and its healthy foliage. Not a rampant grower, but a very constant bloomer.

Norman Lambert. The brilliant coloring of this variety is its great attraction—deep chrome-yellow, margined and splashed with orange-scarlet. It is not a strong grower, but is quite liberal with its flowers.

Richard E. West. I think it is the most attractive of clear light yellow varieties. It has a good habit of growth and is a fairly profuse bloomer.

Roselandia. A fairly good yellow shade, but not so attractive as others of the same color. Its good foliage and constant-blooming qualities give it a high place.

Royal Scot. Only medium size, but more vivid orange-yellow than any other rose with which I am acquainted.

Sensation. The fragrant, scarlet-crimson flowers hold their color well. Last year they were the best red late in the season.

Shot Silk. The delicate color—cherry-cerise, overshot with salmon—is most attractive, especially late in the season. It gives a plentiful crop of flowers.

Silver Moon. No other white climber equals Silver Moon in beauty of flower and vigorous growth.

Souvenir de Georges Pernet. For size and shape of flowers and for constant blooming, I know no bright, dark pink that equals it.

Una Wallace. A most satisfactory soft tone of cherry-pink. The flowers have good substance and shape.

Ville de Paris. Very pleasing, bright, clear sunflower-yellow, with just a touch of orange. It blooms fairly freely on good stems and keeps on late in the season.

Winnie Davis. An old, soft rose-pink variety with splendid growth and foliage.

Roses Which Give Most Pleasure

By MRS. J. A. FRANK NEAL, Syracuse, N. Y.

EDITOR'S NOTE.—We are fortunate in having two lists of favorites from the rosy city of Syracuse where the great E. M. Mills Rose-Garden is now undergoing expansion. Mrs. Neal's article shows careful study and comparison of varieties. Her list is no collection of "duds"!

AMONG the roses which give me most pleasure I do not hesitate to give first place to Duchess of Wellington. This lovely lady is so very dependable and seems to try and see how many large yellow blooms (often six inches across), she can produce. The bushes almost never mildew or black-spot. I can never resist buying two new ones each year.

Souvenir de Claudius Pernet. My older bushes furnish most gorgeous blooms which look almost artificial. I like to place a Claudius in a vase by itself; it will grace any room.

Gayety is the daintiest of fancy-colored roses. It is not overly full, but the petals are so beautifully ruffled that it looks well filled.

Golden Emblem combines with other roses more gracefully than Souvenir de Claudius Pernet, but is not as generous with its gorgeous blooms.

Lady Hillingdon, with her slender brown stems and brownish foliage, is a very hardy, deep saffron Tea rose which lasts long and combines well with others for table decoration.

Mrs. Aaron Ward is rather small, but one can always find a few blooms for the buttonhole or to fill out a table decoration. I notice that men love to go from the garden wearing a Mrs. Aaron Ward.

Angèle Pernet is a wonderful shade of brownish yellow and very beautiful. I am hoping this lovely rose will do better when thoroughly established.

William F. Dreer is wonderfully beautiful but there are not so many blooms during the summer. They are nearly always perfect. This gentleman's foliage needs plenty of attention.

Mrs. Ambrose Ricardo. One large bloom of this will attract more attention in a room than a whole bowl of beautiful mixed varieties.

Miss Lolita Armour makes a lovely showing in the garden or alone in a bud-vase, but looks too heavy when combined with other roses.

Souvenir de George Beckwith attracts a great deal of attention in our garden. It is similar to Lyon Rose, only more double and a better bloomer.

Mme. Butterfly is very dependable and fragrant. I like it better than Ophelia and count it among our very choicest roses. It is a good hot-weather bloomer.

Lulu has a most unusual, long, tapering bud, said to be the longest of any rose. Mr. Neal always wants me to place one of these in my refrigerator before breakfast for him to wear. In this way it will keep without opening up all day, even in hot weather. We love our Lulu!

Mme. Edouard Herriot has a very warm place in my heart. Placed in a bowl with yellow, apricot, and salmon roses, the Madame attracts attention.

Beauté de Lyon is unique, and I would not be without it. The plant is first to bloom in June and is through when Herriot and some of the early ones begin. I do not cut this rose back unless some cane looks unhealthy, but I simply cut the ends of the canes. It stands about 4 feet high, with large, strong stems

covered with huge thorns. These stems are staked to the ground in winter. There were seventy-five large, perfect blooms at one time on one bush this year. The color is deep copper-yellow and the flower is semi-double and very fragrant.

Soleil d'Or has been discarded from many gardens because of black-spot, but we find it very lovely, and are willing to give it a little extra spraying and dusting. We cut out only unhealthy wood and clip the tips of the long canes. In this way, a blossoming branch will come from every eye. We were repaid this year by having each of our two bushes produce over seventy-five perfect golden blooms at one time. This makes a most attractive spot in the garden. We also lay this bush down for winter protection.

Juliet is another great favorite with us. We trim out only the unhealthy canes and clip the tips of the others, to induce laterals. The buds are golden and globular, opening a lovely deep pink with old-gold on the outside of the petals. The flowers are often over 3½ inches across, very uniform in size and shape, and I have had 125 on one bush, at the same time 95 on another. The accompanying picture,* taken in June, 1928, shows the two Juliets a few days before they were in full bloom. We also lay our Juliets down in winter to protect the tops. These bushes need plenty of spraying and dusting to protect the foliage, but it pays.

Lady Pirrie is wonderfully free-flowering and the color of the buds is so striking one notices them across the garden. The bush is very vigorous.

Mrs. Lovell Swisher is a fairly new rose of distinct color—a deep copper-salmon at the base and salmon-pink at the tips. It is vigorous and lovely.

Betty has such glorious, long, coppery pink buds, and her stems and leaves are so glossy and rich! The flower is very large and rather single. Betty never mildews or black-spots and is a great favorite.

Mme. Léon Pain is one of the best of the lighter roses; it is a constant bloomer, and there is enough yellow with the pink, in the bud and bloom, to make this lovely flower combine well with either yellow or pink for table decoration.

Radiance I am very fond of. It is such a good grower and bloomer, and I like the shape of the flower.

Columbia is a lovely and very fragrant rose, usually at its best in the fall. It will keep a long time when cut and is a good hot-weather rose.

Lady Alice Stanley is large and full. The outside petals are much lighter than the inside. It is fragrant and a very lovely shape.

Jonkheer J. L. Mock is very handsome in the garden, and the perfect bloom lasts a long time, either on the bush or in water. I like to leave it on the bush, as it looks almost artificial in the house. It balls in wet weather.

La Tosca is one of the best light pinks. The cup-shaped buds and large, loose flowers are most attractive used alone or with pink roses of other shades.

Dame Edith Helen is a very large, deep pink rose on a strong stem, very sweet scented, and the petals curl back gracefully. The growth is vigorous, and I hope she will be more generous with her blossoms next year.

Mrs. Theodore Roosevelt is very double, beautifully shaped, light pink, with a deeper center; not a very free bloomer, but so perfect I have heard people exclaim, "I did not suppose the Lord ever made a rose so perfect!"

Willowmere has long, pointed buds of a deep pink with enough yellow in it to combine with either yellow or pink roses. It is a gem.

Queen Beatrice is a lovely deep pink, overshot with a silver sheen. It is an excellent bloomer and has little trouble from mildew and black-spot. It should be combined with white or pink roses, as it will clash with yellow or salmon.

Killarneys all do well in our garden. The Double White and Double Pink

*Reproduced as Plate VIII, facing page 57.—Editor.

grow the tallest and possibly are the freest bloomers. Killarney Queen and Killarney Brilliant always have some pretty pointed buds to offer, and the single ones are good bloomers, too. They all need the dust-gun used often.

Mme. Jules Bouché is my favorite white because of its shape and freedom of bloom. It will black-spot unless one continually uses the Massey dust.

Grace Molyneux, one of the lighter roses, is a constant bloomer, with good foliage, and grows very tall. It is nearly white, with a shade of apricot and light flesh-color; has Tea rose perfume.

Mrs. William C. Egan. A very perfect flower, of a light flesh-color with a pink center. The blooms are so heavy and the stems so frail, that the buds should be picked before a rain. It does not bloom well after June.

Molly Sharman-Crawford. A fragrant, white Tea rose which is most satisfactory and a good bloomer. The greenish bud opens to a flat, snowy white flower which lasts well either on the bush or in water.

Kaiserin Auguste Viktoria. My climbing Kaiserins bloom better than the dwarfs. The bud is prettier than Molly Sharman-Crawford, but Molly is more generous in blooming.

Chateau de Clos Vougeot is the lovely, velvety red rose which causes most comment in our garden. The sprawling bush should be trimmed so the branches grow upright, and then the stems will be long. The fragrance is wonderful.

Laurent Carle is another very fragrant, red rose with good keeping qualities, and it is a generous bloomer. One can always tell Laurent Carle by the little white streak on the inside of one of the petals.

Robin Hood gives us plenty of tight, well-shaped, fragrant buds all summer, of a darker shade than Laurent Carle. It never balls, although it is very full.

Souvenir de Georges Pernet provides brick-red buds which open into fragrant, deep pink blooms of enormous size. Like Claudius Pernet, it is hard to establish, but it pays if you have patience to wait.

Red-Letter Day is brilliant scarlet, and for one who likes single roses with a wealth of yellow stamens, it is very satisfactory. The bush is very large and the flowers keep well.

Padre is copper-scarlet, with yellow at the base of the petals. A tall bush, very free-flowering, it makes a great show. The blooms open rather single, but it is very graceful and flowers all season.

George C. Waud is admired for its unique color—a light red with a touch of orange and vermilion. The blooms are double and have high-pointed centers.

Augustus Hartmann is a lovely shade of light red, and I usually leave these blooms on the bush to make a show in my garden.

Admiral Ward is also one I seldom pick. The pinkish red blooms are more effective in the garden than in the house.

Other favorite Hybrid Teas include Bedford Crimson, Golden Ophelia, Senateur Mascuraud, Roselandia, Mme. Jenny Gillemot, Harry Kirk, Louise Catherine Breslau, Mrs. Charles Bell, Dean Hole, My Maryland, Independence Day, Sunburst, Rev. F. Page-Roberts, Mrs. Lovell Swisher, Mrs. A. R. Waddell, Souvenir du Président Carnot, Kootenay, Red Radiance, and Irish Hope.

Commandeur Jules Gravereaux is a red Hybrid Perpetual with lovely pointed buds and rather single, peony-like, velvety red, fragrant flowers. This is one Hybrid Perpetual I have never yet had the courage to take out, and the large blooms, with ragged petals, are often 6 inches across, and make a very striking picture in a bud-vase. The bush is low and blooms all summer.

Gloire de Chédane-Guinoisseau is an aristocrat. It is a dark, velvety crimson Hybrid Perpetual, with fragrant flowers of the largest and finest shape imaginable. The buds come in large clusters, and if you are courageous enough to

leave only a few, you are repaid by gorgeous, well-shaped blooms on fine, long stems. The bush is very upright, and mildews if one does not dust often.

J. B. Clark is so lovely and fragrant and gives me such enormous red blooms that I found a place along a fence for two when my Hybrid Perpetuals were nearly all discarded. It seemed to respond to my appreciation by giving more and larger blooms than before the moving.

Gruss an Teplitz in its fine bushes, makes a lovely, satisfactory background next to a fence. They seem to be glad to be placed where they can grow tall and show off their shining red heads, nodding in the breeze and seeming to say, "Just leave me here to look pretty and I'll cover the fence." Gruss an Teplitz does better for me on its own roots.

Of our climbers, those which we enjoy most are:

Paradise, with its graceful pink clusters of single, ruffled flowers, white toward the base and a large cluster of yellow stamens.

Paul's Scarlet Climber shows its wonderful shade of scarlet flowers which last until all have opened and make a brilliant show for a long time. The color does not turn blue or darken and the foliage is good.

Tausendschön is our favorite climber. It is thornless, an excellent grower, has very large clusters of beautifully ruffled flowers in shades of bright rose, creamy white and faint yellow. The accompanying picture* was taken of the Tausendschön on our piazza in June, 1928.

My Favorite Roses

By MRS. FRANK HARRIS HISCOCK, Syracuse, N. Y.

SINCE I live in an old-fashioned place, have an old-fashioned garden, and am a little old-fashioned myself, I am inclined toward my lovely old Hybrid Perpetual roses. Most of them have been planted since 1899 in the two beds where they now are. Some of the same varieties were grown on this old place by my father and mother when I was a girl. Because red varieties do not harmonize so well with my other flowers and bother some in wet weather by balling, and the like, I have cut out most of them and filled in with others. These roses need no care, save simple pruning in the spring, fertilizing with sheep-manure twice a year, and spraying, of course. They grow like mad and give wonderful results.

The one glorious red rose that harmonizes well in the garden is Gloire de Chédane-Guinoisseau. It is so well named. Its color blends beautifully with the other flowers but it keeps me pretty busy disbudding all the time. A green vase full of these gems on our library table this June made a never-to-be-forgotten picture in my memory.

*Reproduced as Plate VIII, facing page 57.—Editor.

PLATE VII. A fine specimen of the new Hybrid Tea, DUCHESS OF ATHOLL

PLATE VIII. Roses in the garden of J. A. Frank Neal, Syracuse, N. Y.
JULIET above, and TAUSENDSCHON on the porch

Paul Neyron, Mrs. John Laing, and Mrs. R. G. Sharman-Crawford are all lovely pinks and good second bloomers. As I am writing this (October 1), a beautiful bud of the first stands on a nearby table. Baroness Rothschild, very robust, with stiff canes and delicate pink flowers, is charming. Margaret Dickson is not as strong-growing as some others, but is a lovely shade of pink. Frau Karl Druschki we all know so well, but I prefer Georg Arends. It does not need so much disbudding, and the buds are beautiful. Suzanne Marie Rodocanachi has deep pink blooms and the vigorous, healthy plants need disbudding. Clio is a fuss, too, but this summer did not get much attention. It was not disbudded, and I picked a regular bouquet on one stem. It was beautiful! Of course, it was a freak, but so has been this summer. Marshall P. Wilder is a cherry-colored variety and long bloomer; Ulrich Brunner is nearly the same shade.

My General Jacqueminot has a real story connected with it. A very dear friend of mine had a small pot of this rose given her when she was very ill. It had one full-blown rose and two buds, and it lasted a long time and gave great pleasure to this young patient. After she went away, I plunged it, pot and all, in the ground under some grape-vines, where it stayed uncovered all winter. The following spring it was planted in one of my rose-beds. That was thirty-three years ago, and it is still growing rampantly and blooming beautifully. I think this shows what a good, robust rose it is.

After these roses are through blooming, one wishes to put a screen around the beds, they are so leggy and forlorn-looking. The soil is so "mossy" green this fall that they worry me some about next summer, but they are so thorny and scratchy it is hard to keep them cultivated all the time. This horrible season has made everything queer. The deluges of rain, followed by a boiling hot sun, are not good for anything.

These are my favorite roses, and while they do not give the bloom of the Hybrid Teas, they do not require as much care, and every garden needs more of them. My garden, it seems to me, is never so lovely as when they are in bloom, with the pale blue delphiniums lifting their tall spikes in beds just in front. On a hot June evening it makes one cool just to look at this picture.

The Favored Few

By A. J. WEBSTER, Toronto, Ont.

WHY do we love roses? Is it merely on account of the effect on our senses of the color, form, or fragrance of the blooms, or is there a more subtle and important reason for our rose affection? The position of the rose in the floral world would seem to correspond to that of man in the animal kingdom. Its requirements are many and varied, as are those of man, and because of its capabilities under intelligent supervision, it grips our imagination and grows into our very lives.

But why do we love some roses more than others? I find that certain varieties stand high in my regard, not because of their ease of culture, but frequently on account of the difficulties encountered in obtaining satisfactory results. There are a number of varieties, willing workers, indispensable perhaps because of their reliability, but which are incapable of giving the thrill which the occasional perfect blooms of other varieties invariably supply.

Let us consider, first, two prime favorite Hybrid Perpetuals: Frau Karl Druschki and its seedling, Candeur Lyonnaise. The former is certainly well known, but to obtain perfect blooms we must disbud and, generally speaking, it is better to remove the center bud and the less promising of the side buds in their early stages of development rather than to follow the usual practice of removing all but the crown bud. Frau Karl will perform with greater abandon if her long shoots are pegged down, and this, by the way, applies to several other Hybrid Perpetuals and to vigorous-growing Hybrid Teas like Avoca. Candeur Lyonnaise at its best never fails to delight, for while large, and not pure white, yet it does not surrender refinement, and, if well grown, is about perfection in form. Like its parent, it lacks fragrance, and is not a free bloomer.

Although often listed as a Hybrid Tea, George Dickson has most of the characteristics of a Hybrid Perpetual. Shy-blooming after the first crop, weak-necked, split-centered blooms, awkward habit of growth, and susceptibility to mildew are charges to which George Dickson must plead guilty, but these

faults are all forgiven in the moments of exultation over the occasional magnificent, fragrant bloom of velvety black-crimson, full and high-centered, and borne on a stout stem. The opening of such a bloom is one of the high spots of the season to me.

Gloire de Chédane-Guinoisseau produces blooms that deserve special mention but they do lose their brilliant color with age, and one must be careful to remove promptly all faded blooms, to avoid unfortunate color clashes. For exhibition purposes, this rose at its best is unique.

The list of Hybrid Teas which are satisfying in varying degrees is long and I will have to omit many, confining myself to those which yield maximum satisfaction.

Betty Uprichard is one of the loveliest decorative things in the garden—vigorous-growing, both on Rugosa and Canina understocks, disease-resistant, and particularly free-blooming. It is easy to get along with, asking little, and its successive crops of bloom crowd each other throughout the season.

Captain Fane Bald is one of the most prolific autumnal bloomers. It is not immune to black-spot, and its fragrance is not of the type that "jumps to the nose," but, notwithstanding, its many good qualities warrant an honored place in the rosery. Its color is rich crimson that is well maintained.

Another variety *à la militaire* is Captain F. S. Harvey Cant, a tall, dashing sort which produces large, full blooms of good form and lasting qualities on long, strong stems. In cool, wet weather, the large buds occasionally experience difficulty in opening. Next season I propose cutting down the rations of some varieties which sometimes open badly, in the hope that by reducing the size, more satisfactory results may be obtained.

A wonderful garden rose is Charles K. Douglas. Its blooms are not of the approved exhibition type, but may be included in decorative baskets, and, although lacking scent, they make up that deficiency by the brilliance of their intense scarlet color. The plant is perfectly hardy here, a vigorous grower and a willing worker.

The lover of good rose form should not overlook Clarice Goodacre. Somewhat scantily clad—*à la mode*—and with a stem not overstrong, this variety produces blooms which in their

half-opened state cause one instinctively to remove his hat! She demands plenty of rich food if she is to appear at her best. Clarice Goodacre must be given credit here for having converted two former specialists in other flowers to the cult of the rose during the past two years. "Those who came to scoff remained to pray."

A deep crimson rose that is particularly satisfying, especially early in the season, is Edward Mawley. I am aware that it is reputed to possess poor constitution and the foliage is not carried up the stem as well as one might desire, but it appears to be quite happy in my heavy clay soil and produced some very good exhibition blooms during the past season.

For a boutonnière, the last word is Emma Wright, producing, with amazing freedom, long buds of exquisite shape and startling brilliant orange color. If allowed to remain uncut, the expanded blooms are very thin, and, at the end of a sunny day, little remains of the original orange tint.

I feel that it would be unfair to omit Ethel Somerset. Perhaps there is nothing very distinctive about the color—shrimp-pink—but the growth is symmetrical, the constitution sound, and the buds and blooms of satisfactory shape and substance. My experience indicates that Ethel Somerset is superior to the much-advertised Dame Edith Helen in every respect save scent.

Etoile de Hollande is surely a dish for the gods! The only criticism of this rose which I could offer would be on account of insufficient petalage, but its virtues of color, productivity, fragrance, and vigor are so outstanding, and speak so loudly, that the feeble voice of its shortcomings is not heard.

It is the evil fate of most yellow roses to fall easy prey to black-spot, but a conspicuous exception is Feu Joseph Looymans, which would be worth growing for its foliage alone; but when one recalls the pointed buds, sometimes almost 3 inches long, of an intense apricot shade and of ample substance, one can only say that this variety is indispensable, be the rose-garden large or small. The color of the open blooms is delightful in any stage of development. One is frequently inclined toward extravagance of language in discussing a rose of which he is particularly fond, but I feel that I have exercised a commendable degree of restraint concerning Feu Joseph Looymans.

Gruss an Teplitz must be included among the favorites, and as a decorative shrub I know nothing to equal it. It is too well-known to need discussion of its many fine qualities.

Lord Charlemont occupies a high place in my affections, despite its susceptibility to black-spot. No rose can surpass its brilliance and constancy of color—a few tones lighter and brighter than Etoile de Hollande. Its petals are not quite so long as those of the latter variety, but there are more of them, and the center is well concealed. The early season bloom is of better quality than that of autumn, due, I suppose, to the ravages of black-spot. My plants of Lord Charlemont become hospital patients each year about mid-August.

One of the few varieties which appear to be happier on Manetti understock than on either Canina or Rugosa is Los Angeles. On the latter stocks it has been anything but satisfying, but on Manetti this variety has demonstrated its capabilities in no uncertain manner. This matter of understocks is important, and I wonder if other growers have experienced marked variations in vigor and productivity of Los Angeles and that other Lyon seedling, William F. Dreer, when budded on different stocks.

Those who exhibit should not neglect Mabel Turner, a large, full salmon-pink of ideal form and great lasting qualities. It opens slowly and occasionally with difficulty, and for general garden purposes it is best not to disbud too severely. The plant is a willing grower in my heavy clay, and thus far I have observed no evidence of black-spot. In early season this year, my plants of it threw a number of blind shoots.

The virtues and vices of Mme. Edouard Herriot are so well known that one has only to mention this variety to recall them all. The climbing sport, however, is not so extensively grown and I can heartily recommend it to those who have the required space. It appears to be as hardy as an oak, produces canes 8 feet in length which bend gracefully, and, with no pruning, produce hundreds of delightful blooms from mid-June to mid-July and a few scattered blooms until October. Like most others of its type, it requires two years to become established, but it is well worth waiting for. But such thorns!

Mme. Jules Bouché, one of the garden slaves! While not

pure white, it is probably the most satisfactory of its type because of its reliability and prolificacy. It will produce show blooms, too, if carefully grown and disbudded.

Miss C. E. Van Rossem is included solely on account of color—an intense and unvarying crimson. The blooms are of good shape but not too full. They are small, as is also the plant, and the scent reported by some growers is not apparent in my experience.

In the 1928 Annual, Mr. Nicolas described Mrs. Beatty as "A Mabel Morse that will grow and behave," but with me it is entirely dissimilar to Mabel Morse in color, shape, habit, and constitution. I wish the blooms *had* Mabel Morse's color; but even as it is, they are very beautiful—a pale, soft yellow, reminding one of the cottage tulip Moonlight, and fading equally as quickly. The buds are long and the blooms sufficiently full for all purposes, but I have not found Mrs. Beatty a particularly free bloomer.

Brighter than Mrs. Beatty, but with a little less substance, is Mrs. Beckwith. The foliage, also, is very decorative, and, while not entirely free from black-spot, Mrs. Beckwith certainly is not the worst offender in this respect. It is easily my favorite among the pure yellows.

We must not expect jam and butter, too, and with the outstanding quality evident in the blooms of Mrs. Charles Lamplough, one should not expect many of them. The thrill I receive at the sight of a perfect bloom is sufficient to warrant the retention of that variety.

Mrs. Franklin Dennison ranks high in my esteem because of its vigor and of the superb, full, high-centered blooms. The color is rather undecided and it varies with the season.

Invariably a prey to black-spot, but producing so freely blooms of such exquisite charm as to render it a favorite, is Mrs. Henry Morse, a delight until mid-August and thereafter a sorry spectacle.

Ophelia—but why mention it? It will be sufficient to say that if I could have only one rose it would be Ophelia.

On account of its splendid form and rare color, Rev. F. Page-Roberts must have a place in my "Who's Who." I have been unable thus far, however, to get the plants to grow satis-

factorily, and I am hoping that the new Lady Forteviot, somewhat similar in color, will prove a vigorous grower.

A truly delightful rose is Richard E. West, soft yellow, fading to creamy white, but a wonderfully free bloomer, and with every bud and bloom of good shape. It is inclined to grow horizontally rather than upright, and many of the stems are short but invariably strong. The reddish bronze foliage is good, and seems to be fairly disease-resistant.

"Among those present" is Souvenir de Georges Pernet. It is capable of producing really sensational blooms, and, although they are rather scarce after July, the variety is worth having.

Indispensable because of its health and the sensational color of buds and half-open blooms, is Sunstar. There are those who contend that Lord Lambourne is an improvement on Sunstar, but my experience does not support that contention, and after three years' trial I have discarded Lord Lambourne. The lifetime of Sunstar's rich color is about four hours, but its buds are produced with remarkable freedom and should be cut *as buds* if they are to be enjoyed to the fullest extent.

If the weather be favorable, Superb will produce blooms which cause one to gasp from sheer astonishment; if not, the result is the same but the gasp is one of horror! The plant is strong and the blooms long and very full. Those which open well afford great satisfaction.

The General is a red which yields considerable satisfaction, especially in early summer. It appears to have some Hybrid Perpetual blood in it, although it is not a tall, ungainly plant. The foliage is soft and susceptible to mildew, and its chief virtue is in the magnificence and munificence of its early bloom.

"Divinely tall and most divinely fair" is Una Wallace, which without any pampering yields blooms of ideal form on stems 2 to 3 feet in length. To those who like long stems I confidently recommend it. The plant possesses a good constitution, is resistant to disease, has very few thorns, and the bloom has fragrance.

The Editor breaks in here to urge the most careful attention to the last word on black-spot control by before-rain dusting, as detailed on page 34.

Among the Newer Roses

By CLARENCE A. DAVIS, Buffalo, N. Y.

THERE have been many fine roses introduced recently, and while I have not been able to grow all of them, I have had the pleasure of observing a few. How thrilling and fascinating it is to watch a new rose open the first time!

Of all the new varieties, Sir David Davis tops the list. It is a striking dark red which does not blue, and produces abundantly throughout the season. The glorious flowers are medium full, quite fragrant, and keep very well when brought into the house. I am especially fond of this rose.

Lady Margaret Stewart is a charming little rose of a popular color. Unfortunately, the petals are a trifle short, giving the open flower a cupped appearance, but the center is well covered. On the other hand, the exquisite fragrance and warm, lasting color compensates for its form. Let me propose that an unacquainted friend try several of them in a low bowl. The effect is delightful.

I like Dame Edith Helen because it is such a brilliant pink. Its elegant buds are borne on long, strong stems, producing perfectly formed flowers with nicely reflexed petals. The fragrance is slight, but it is a good grower and has been an excellent bloomer in my garden. The fall bloom was not so good as the June display, but this is its first year. I expect great things of Dame Edith next season. When brought into the house, it will last for days if cut in the half-open stage.

Margaret McGredy is an unusual color—startling brick-red. It is very vigorous, growing almost as tall as Radiance, and its tulip-like flowers remind me of that variety. The flowers rarely come singly, usually being borne in clusters of two or more, and they do not keep well when cut. No doubt it will find its place as a superb bedding rose.

The Polyantha, Frau Dr. Erreth, is an exquisite little rose of golden yellow. The charming flowers are very double and are usually borne singly, reminding me of a small Mrs. Aaron Ward. Its growth is not as vigorous as the more common Polyanthas, and it is not so floriferous, but it is a perfect buttonhole rose.

Mme. Albert Barbier is a splendid rose of fine blooming

habit and has a wonderful color, difficult to describe—soft cream-yellow, lighted with salmon tints, that are more pronounced at the center. While termed a Hybrid Perpetual, the growth is not robust, like most of the class, but dwarf and refined, like the Hybrid Teas. I believe it is valuable.

Wilhelm Kordes, which was planted late in the season, gave a few wonderfully colored flowers, and I have great hopes for it next year. I intend to plant it in semi-shade to bring out the water-lily tints.

Rev. F. Page-Roberts is a beautiful thing, but so disappointing in growth and flowering! Semi-shade might help.

There are some roses, not quite so new as those mentioned, which, nevertheless, are great favorites with me. Etoile de Feu is a gorgeous orange-flame and a fine bloomer and keeper, with delightful fragrance. Etoile de Hollande, a beautiful red, is probably one of the sweetest roses. Mrs. Henry Bowles is striking cerise-pink and blooms abundantly, but does not keep well. Souvenir de Claudius Pernet, in spite of its faults, is about the most dependable clear yellow I know. It is an excellent bloomer, the buds are of elegant form, and it is one of the very best keepers. Betty Uprichard is a little gem, especially in the fall, when the coloring is superb deep salmon and copper.

Among My Favorites

By MELVIN E. WYANT, Mentor, Ohio

EDITOR'S NOTE.—The Lake Shore District in northeastern Ohio is a great nursery country, and Mentor is in the midst of it. There are dozens of important concerns in that region, amongst which Mr. Wyant's rose nursery is notable. In Mentor also lives Mr. Horvath, the very modest horticulturist who originated the very first Wichuraiana hybrids, the forerunners of the great race of modern climbers. We have tried in vain for four years to get him to tell the story for the Annual, and we do not yet despair.

THE roses which I like best are not only those which are beautiful, but those which also do well under most conditions. Whether a rose is fragrant means very little to me. Form, substance, continuity of bloom, and hardiness are the qualities which mean the most.

My first choice is Rev. F. Page-Roberts. The color of this elegant rose, especially in the fall of the year, just suits me. Its

size is wonderful, it is fully double, and the shape of the expanding flower is all that can be asked. Above all, it is a continuous bloomer, one flower coming right after another.

Wilhelm Kordes, my next choice, has different colors than any other rose, old or new. It has the red, salmon, and golden shades all blended into one flower with prominent veining. It might be called an autumn-hued rose. The flowers are large and have great substance; the buds hold well in the center as the petals unfold. I also like the beautiful bronze foliage of its new growths, and with me it is a very sturdy, satisfactory grower. If Kordes had as many perfect blooms during a season as Roberts does, it would be my first choice.

Independence Day pleases me, not only with its name but also with its color, quantity of bloom, and its sturdy growth. I believe that this rose blooms more than any other of my favorite roses. It has its rest periods and seasons of bloom as most of the Hybrid Teas do, but it ranks next to Gruss an Teplitz in quantity of bloom, although it is not so tall, growing only about 2 to 2½ feet high. In color it is elegant.

Dame Edith Helen is a rose anyone could love. It is so fragrant that I cannot help smelling it whenever I see one, and the bush is such a tall grower that it seems to lift the blossoms up where they invite me to pick and smell them. Besides having a long stem, it has the admirable quality of lasting a long time after it is cut. The blossom is so very solid and double that it unfolds slowly and is immense when open. Its color is just like many older varieties, but it is far ahead of every other pink rose.

Lady Margaret Stewart and Mevrouw G. A. van Rossem are two other superb roses of the same general color as Rev. F. Page-Roberts. Except in the fall, when Roberts has its deepest shades, I like the color of these roses better. They both have the beautiful new orange and golden tints that I like so much. Their growth is also more upright than Roberts, but neither has the same wonderful continuous blooming quality.

The Queen Alexandra Rose is so unusual in color that I always look forward to it. The blossoms in the spring are large, perfect, and globular, and when compared with others at spring flower shows they are so different and so perfect that many times they are prize-winners.

Elvira Aramayo is among my favorites because of unique color. Indian red best describes its queer flower. The petals curl lengthwise, cactus-like, as they mature.

Mrs. Charles Lamplough is the best white rose I know. Its large, long, pointed buds hold well in the center of the flower as they open into immense blossoms of a creamy white. The blooms have such great substance that the petals seem to be of velvet. The bushes are tall and erect, giving extra-long stems for cutting.

There are so many more varieties that I must include condensed mention of some of them among my favorites:

Duchess of Wellington for resistance to disease and very long-pointed buds.
Lady Ashtown for its very perfect shape and large flowers.
Los Angeles for its soft, beautiful color when half open.
Mme. Jules Bouché for many reasons. It is very disease-resistant. Its purple new growth is beautiful, and its exquisite, white blossoms hold such a pretty pink tinted center.
Mrs. Ambrose Ricardo for size and delicacy of color.
Mrs. Charles Bell, Radiance, and *Red Radiance* for their fool-proof constitution and their dependable free-flowering habits.
Mrs. Henry Morse for beautiful pink buds and sturdy growth.
William F. Dreer for its real aristocracy. Nothing gaudy, but soft, beautiful shades between pink and yellow.

Of course, it must be taken for granted that all of these roses should be kept free from black-spot, otherwise very few would amount to anything. (*See page 34.*—EDITOR.)

Time-Tested Favorites

By ROBERT HOUSUM, Cleveland, Ohio

EDITOR'S NOTE.—It is probably less than 20 miles from Mr. Wyant's nursery to the cool and lovely garden where Mr. Housum grows his roses, yet their lists of favorites are strikingly different. The remarks in regard to the behavior of Pernetianas are particularly interesting, and we wonder if half-shade has anything to do with it. We have visited Mr. Housum's roses on several very pleasant occasions and our memory is that they have the benefit of much gracious shade from distant trees.

IF A list of roses I like best is to have any value, I must make clear the conditions that governed my choice. In the first place, I have confined my selections to Hybrid Teas, Teas, and Pernetianas because of their similar growth and bloom. Widely different classes of roses, such as the Hybrid Perpetuals and the old bush roses, cannot usefully be compared with these.

Were I to attempt it, I should find myself, for example, putting Harison's Yellow near the top of my list.

In the second place, I have included no roses that I have not grown myself in my own garden, which contains some ninety varieties. These are the only roses about which I feel qualified to speak. For this reason, I have named few of the newer introductions. Had my experience with these been wider, my list would perhaps have been somewhat different.

I have not found the Pernetianas harder to grow successfully than the Hybrid Teas. It is true that they require a little different treatment, and in order to give it to them the more conveniently, I plant them all together. If they are given a little extra care, I do not find that black-spot conquers them more readily than their supposedly more resistant sisters. Indeed, my Pernetiana bed held out this year against the ravages of this disease more gallantly than any other, and when frost came it found the bushes still decently clothed with leaves.

It is my belief that the Teas have been unduly neglected, and that no rose-garden is complete without their delicate loveliness. There are, of course, some climates where they cannot be grown, but in Cleveland I give them no more winter protection than the others, and that is by no means elaborate, yet my losses have been no greater in proportion than among the Hybrid Teas. I have hitherto planted only the hardier varieties, but I propose to experiment with others to see if I cannot safely enlarge my list.

My selections are not always based upon the beauty of the blossom. I care much more for roses in the garden than in the house, although their value as cut-flowers remains a factor. Some are so lovely that I am willing to overlook comparatively poor bushes; in other cases, my fondness for the blossoms is enhanced by the good habit of the plant. If I were making a new garden and could have no more than fifteen varieties, these are the roses I should choose:

Mrs. Ambrose Ricardo. The large, chalice-shaped blossoms are of an indescribable creaminess, and the center honey-golden, each succeeding row of petals growing paler and changing ultimately to a faint pink. Its fragrance is good but not strong. The bush is subject to black-spot and needs care to prevent it from dying out. While the number of blossoms is not great, their quality is supreme.

Rev. F. Page-Roberts. It is the blazing color of this blossom—the richness of its yellow, particularly in the fall, the splendor of the reddish splashes on the reverse of the petals—that gives it a place in my list. It is too niggardly with its blooms, and in vigor of growth is below standard. On the credit side I must mention its freedom from disease and its attractive dark foliage.

Los Angeles. A fine blossom of this rose approximates perfection of form. The arrangement of the petals is almost mathematically correct, yet the singularity and charm of its color makes it a romantic rather than a classical rose. My early experiments with it were mostly failures. I don't know why it suddenly began to grow so much more satisfactorily, for I gave it no special care. Perhaps it takes time to become established. It has a tendency to die out—every few years I find that I lose a bush, but I also find that I replace it promptly.

William F. Dreer. I do not know why this rose has acquired the reputation of being hard to grow. It has never given me the slightest trouble, for it is vigorous, free from disease, and a free bloomer. I know no rose that combines more delicate and bewildering tints. Their evanescence is a fault; the sun bleaches them. The bush should have a little shade if possible. As an alternate to this I must mention *Wilhelm Kordes* which is not dissimilar, although its habit of growth is somewhat stiffer and less graceful and its colors less delicate. Its blossoms are more gorgeous than those of William F. Dreer, but, to my taste, less beautiful.

Mrs. Aaron Ward. I praised Los Angeles for its perfection and I choose Mrs. Aaron Ward partly for the attractive irregularity of its form. I like the low, neat habit of the bush, the pointed, holly-like leaves, and the generous, successive crops of small blossoms, yellow in the bud, tightly furled in the early stages of their development, and varying in color as they open.

Louise Catherine Breslau. The form of this rose suggests a water-lily, fully open. The color is a glowing yellowish salmon, and not the least of its beauties is its dark green, burnished foliage. It has grave faults—I have no rose in my garden more susceptible to black-spot, and it is not a free bloomer.

Lady Alice Stanley and *Rose Marie.* I do not know to which of these pink roses to give first place. Everyone knows the heavy, drooping blossoms of Lady Alice Stanley with their many petals and two tones of pink. I really do not know what more anyone can ask for in a pink rose. Rose Marie is more aggressive—bolder in color, somewhat larger in size, opening out perhaps more satisfactorily. The deep color of the heart, fading out somewhat from the center, is a distinctive mark.

Mme. Jules Bouché. Quite small, white, flushed with pink in the center. The form is excellent, particularly in the bud; a moderate bloomer, and the growth of the bush neat and attractive, with particularly good stems. I believe I like it better than any of the large Ophelia family.

Prince de Bulgarie. This, one of the earlier ancestors of the Ophelia clan, is still my favorite, although it has been almost superseded by Ophelia and Mme. Butterfly. Perhaps the salmon tinge is what attracts me—my weakness for yellow roses must be already evident. There is a curious little fold of petals in the center to give it individuality, and the copperish colored new shoots are somewhat more pronounced in color in this rose than in its later relatives.

White Killarney. On the whole, this is the most satisfactory white rose in this class. It does not bloom quite so freely as the pink Killarney, and it is subject to mildew, but the growth is good; and the blossoms are of the Killarney type, which I like very much in spite of, or perhaps because of, their rather deficient petalage.

Red Radiance. I am afraid this choice shows that I lack "an appreciative

and cultivated taste," and would prevent me from graduating from Mr. G. A. Stevens' "Short Course in Rose-Culture."* Nevertheless, I remain obdurate. I fully agree with him that many red roses have better blossoms, but no other can take the place of this rose in the garden. The sturdiness of its growth, the splendid, heavy, green foliage, and its freedom of bloom must give it first place, and the blossoms themselves are handsome. The color of pink Radiance has always seemed comparatively uninteresting to me, but this rose is a good red, and while I generally prefer a high-pointed center, these large, tulip-like blossoms, in their setting of dark green, command unfailing admiration.

Laurent Carle. This rose has fine color, sweet perfume, and excellent form, with the much-desired high center. It blues slightly, but not so badly as most, and is not a strong grower. Yet it is the most satisfactory red blossom in my garden. I should, perhaps, state that I have not yet tried Etoile de Hollande.

Richmond. I should like to speak a good word for this much-neglected and somewhat discredited rose. Sixteen years ago, before I knew anything about roses, I planted a large number of Richmonds, bought from a cut-flower grower, who threw the plants away after forcing them. According to most authorities this is a highly reprehensible practice, but I knew no better. Almost all the original bushes are still in my garden, and have always given splendid and quite continuous bloom throughout the summer. They are hardy and vigorous, but the habit of growth might be more pleasing and they are somewhat susceptible to black-spot. The blossoms are gorgeous in the spring and fall, although they fade and blue in the sun, and the midsummer blooms are not very attractive. But I have found this rose superior to many with far better reputations.

Marie Van Houtte. This is my favorite Tea. The white, waxy buds are exquisite and open better than most Teas, and although the open flower is rather flat, its full petalage and peach-colored center make up for that fault. It is the most vigorous of my Teas, and I like the way it grows, more upright than most of its class, with a zigzagging, slantwise growth that never permits the blossoms to trail in the dust, like Maman Cochet. It has a distinct Tea perfume, good foliage, and superb stems.

Some Yellow Roses I Like

By CLYDE O'ROARK, Covington, Ohio

I BELIEVE that I like yellow roses just a little bit better than all others because of the fine, old-fashioned yellow rose that grew by my grandmother's doorstep in old Virginia. This tremendous bush, that was always the first of the numerous old-fashioned roses to bloom, was literally covered with a mass of cheery, yellow, semi-double bloom each season, and well do I remember how impatiently we used to wait for what we knew simply as "The Yellow Rose," but which any of you will recognize, of course, as Harison's Yellow. I have had a warm spot for it in my heart ever since, and though I occasionally see a small, straggly bush in this part of Ohio, I have never seen

*Published in the 1928 Annual.—EDITOR.

any of such mammoth proportions as those that grew in the Shenandoah Valley of Virginia.

For quite a long time, most of the catalogues listed only about two yellow varieties, Duchess of Wellington and Mrs. Aaron Ward. Then came Sunburst, and I thought we had wonderful yellows, even if two of them were as apt to be white as yellow, and the Duchess was not nearly full enough to suit me. But anyone who has ever had a bowl of Duchess of Wellington in a room knows that wonderful apricot fragrance which will keep this reliable old variety with us for many years. I have the original bushes that I started out with in these three varieties. Sometimes they dwindle down somewhat, but a little extra care, and away they go again, good as ever.

For years it seemed that we would never get a yellow Hybrid Tea for the garden that would keep its color in the hot sun. Then came Souvenir de Claudius Pernet. The first time I ever saw this rose in the garden, "I fell for it," and though a majority of its buds ball and look like chunks of dough, and many of its blooms have a big, ugly black button if you don't pinch out the center bud, just wait till some blazing weather in July and August rolls around and then you will see what a yellow rose really can be! Some will be so full of petals that it is a mystery how they all come from one bud, and now and then you will find one with the inner petals striped scarlet; those are indeed my delight. Where can you find a rose with finer foliage than this? Those rich, glossy, varnished leaves would win this rose a home with me if it only produced one good bloom a year, which I regret to say is about its limit sometimes. Souvenir de Claudius Pernet is far from being a perfect garden yellow, but I shall not throw it overboard yet.

If it were not for the poor stem that Eldorado sometimes shows, I would say it was the best yellow garden rose. If you can make it produce new shoots, it will have strong stems. Only flowers on older wood seem to be afflicted with weak necks. The foliage is somewhat sparse, and the bush is not quite so free as some, but the individual bloom is very large, too, and has no ugly center.

Rev. F. Page-Roberts is sometimes more pink and carmine than I like in yellow roses, but, nevertheless, is one of the very

best of its color. It is rather low and spreading, with sparse foliage, but a free bloomer, and some of the flowers have been very large. I like it best half open, and the color varies according to the weather. I especially like the rich, fruity fragrance.

Mrs. Erskine Pembroke Thom is much superior to Souvenir de Claudius Pernet in every respect. The growth is not quite equal to Radiance, but the blooming qualities are good. I have grown it since 1926 and it has been a steady producer at all times. The bloom holds its color well without scorching and, all in all, this is the best bet in garden yellows.

Some rosarians seemed to think that Ville de Paris would be the long-desired yellow Radiance, but from what I have seen of it, Mrs. Erskine Pembroke Thom has it beaten a mile. The bloom does resemble Radiance somewhat, and does hold its color in an astonishing way. My plant bloomed its head off all season and the growth was wiry but sprawled over the ground.

Julien Potin is not so vigorous as Souvenir de Claudius Pernet but is far superior in other ways, and in bud and open bloom is similar, without the disfiguring center. The color is more golden and holds well in the hottest sun without scorching.

I consider Lady Margaret Stewart a great improvement over Rev. F. Page-Roberts—a better grower, better foliage, and a better bloomer. The buds are particularly beautiful. I had some last season that were actually chocolate-brown before opening. The bloom is full, generally sunflower-yellow, streaked red, and of all the roses having the apricot scent, this one is the most fragrant. If I could plant only four yellow roses, they would be: Lady Margaret Stewart, Mrs. Erskine Pembroke Thom, Julien Potin, and Eldorado.

If someone had asked me last year which was the best new rose I ever tried, I would have said, "Gaiety." This rose is hard to describe; one might as well say it is a pictorial novelty. The open flower is very large and has petals of such substance that they stand the hardest rain and the hottest sun without injury. It was our delight to run our fingers through the open bloom and hear the heavy petals rustle like silk. The fully matured bloom is a mixture of salmon, orange, silver, and Indian red. As this rose grew last year, I defy anyone to find a single fault with it.

Hoosier Beauties

By ARTHUR L. HUBBARD, South Bend, Ind.

WE MIDDLE Western rose-amateurs need varieties that are vigorous, disease-resistant, and good fall bloomers; we also appreciate ample petalage and good foliage. I would not hesitate to start a beginner on three well-known rose families, for they constitute the backbone of my Hybrid Tea rose-garden—Ophelia, Radiance, and Killarney.

Ophelia herself is vigorous and has several good sports: Golden Ophelia, Mme. Butterfly, Annie Laurie, and Mrs. Calvin Coolidge. Add Rapture, a sport of Butterfly, and Roselandia, a sport of Golden Ophelia, and we have a set of roses in cream, cream-pink, yellow, and salmon that average high in size of blooms, with plenty of petals, sun-proof foliage, and a season extending to killing frost. This family does not have the true rose fragrance, to my notion, but it is none the less pleasing.

The Radiance family does all that the Ophelias do in different colors—pink, pale pink, and red. Their fragrance is distinctly different and closer to the spicy, true rose attar. All members of the Radiance family seem to be popular. They are not stylish people, yet are good, substantial company.

The Killarneys form a pink and white family. Killarney Brilliant is almost crimson. If you are a Middle Western rose-lover, do not hesitate to plant plenty of them. Mildew days are few in spring and early summer and none at all in autumn; powder and spray will protect them. Some of the Killarneys have few petals, but the pink of Killarney is distinct from all the pinks in nature. Killarney foliage has distinct color and luster unsurpassed. Many times, in preparing a basket of roses, I resort to the Killarney bed for extra-fine pieces of foliage.

After four seasons I recommend Imperial Potentate as almost without a fault. It has genuine rose-pink color and real fragrance. While it lacks the robustness of the Radiance family, it has vigor enough to bloom the whole season long. Rose Marie, an old friend, is a trifle more subject to winter-killing and needs complete protection. As it fades in the vase the delicacy of coloring is exquisite. Columbia's children, Rose Hill and Briarcliff, have the same beauty in aging petals.

For June blooming we *must* have the Pernetianas. Be good to them for what they do in June, but do not expect too much of them the rest of the year. Some, Los Angeles for example, have a fragrance that excites delight, and all have a color nowhere else found in roseland. I keep them in one bed and plant late gladiolus among them in June, which cover their bare shins very well the rest of the summer. The finest rose bloom I ever saw was that of Souvenir de George Beckwith, but it was the only fine one the plant ever gave me. Souvenir de Georges Pernet does better. Mme. Edouard Herriot, shy in petalage, won a cup once, but you can't make her leaves stick on.

Los Angeles stands in a class by itself. My first experience brought the disappointment that comes to all lovers of the Pernetianas; but three seasons ago I tried it on Ragged Robin, a different stock. The plant is stronger and the foliage holds better although there is still something to be desired. I get a few fall blooms with leaves, which is quite an improvement. This stock suckers, if that is any objection.

Some day the weakness inherent in the Soleil d'Or ancestry will be bred out, which will insure its romantic color and fragrance for generations of rose-lovers to come. I am still a friend of the family and try the new children as fast as the originators thrust them into the world. Angèle Pernet, Constance, Ariel, Etienne Rebeillard, E. P. H. Kingma, Feu Joseph Looymans, and Willowmere are all interesting; Sunstar has more colors than a Navajo blanket, and William F. Dreer, half-open, has the silver and gold seen only in a Dolomite sunset. Did a rose ever bloom that gave pleasure to no one?

Rev. F. Page-Roberts is one of the few roses that do well for me on its own roots. The own-root controversy furnishes considerable copy but it is not profitable to discuss it here. My experience is that budded stock averages better, but several varieties do equally well on their own roots.

What a beautiful rose world it would be if the Polyanthas had inherited fragrance as well as perpetual bloom from their Tea ancestors! My experience with Polyanthas is too limited to say much. I hope some reader of this Annual will write of his experience with other varieties, for there are more than half a hundred to be had. Cécile Brunner gives me much pleasure.

It seems to be very popular with my friends. Visitors always ask for one of those little Sweetheart roses, and Cécile always meets the demand, for as a continuous bloomer it has few equals.

Everything in roses climbs now. Paul's Scarlet Climber was so well advertised that my garage fairly burns with him. His best companion is Mary Lovett; he does not please me next to Dr. W. Van Fleet. Silver Moon requires the maximum winter protection, and is worth it. Aviateur Blériot does well for me about every third year and has a delicate scent; so does American Beauty, but she is gone all too soon.

It took sad experience to teach me to protect Tea roses from late frosts. For this reason let the amateur keep his Teas in a separate bed. The hardiest for our climate is William R. Smith, and it gives blooms well into summer, but few in September. The Maman Cochets ball in June but do better later. Alexander Hill Gray is weak in fragrance but unsurpassed for style. So far as I am concerned, the Teas are useless.

Our old-fashioned folks still admire Paul Neyron, Ulrich Brunner, and General Jacqueminot. My favorite Hybrid Perpetuals are Clio for the light color and the old General for brilliance. Sometimes the General gives me a bloom or two in August; he belongs in every rose-garden. So does that grand old Rugosa, Conrad Ferdinand Meyer. Under one of my bird-houses, Conrad spreads himself 5 feet in every direction.

When one reads that such and such a variety has too few petals he is apt to become prejudiced against single roses. Ethel James, Lulu, and Isobel appeal to me as three of the most artistic flowers in a rose-garden. Innocence should be crowned queen of all; one of her perfect blooms is a flower show.

Dame Edith Helen, Bessie Chaplin, and Lady Florence Stronge have, so far, failed to make good the claims of their publicity agents; Helen died back, Bessie is blind, and Florence has turned out commonplace. Mrs. A. R. Barraclough is lazy, but one bloom is almost worth the waiting. Even the novice knows that a sulky rose will sometimes cheer up if it is moved. I shall try that with Bessie Chaplin. Wilhelm Kordes disappointed me with only three blooms for his entire second season; the remedy may be to buy more Kordes and not to judge a summer by one lazy swallow.

The barkers for Dame Edith Helen are so persistent that it may be a mistake not to buy more tickets for her show, but when you think of Willowmere, a rose without fragrance and soon without leaves; of Miss Lolita Armour, always hanging her head; and all the faults found in so many extravagantly advertised plants, you wonder what is going to disappoint you in Dame Edith or Ivy May or Marion Cran. Buy them all and do not blame your dealer. What can you expect of an aristocrat from Bagatelle Gardens transplanted into a back yard in Indiana? This is a game; it would become very monotonous to win every trick. I would prefer to have a new rose overly praised than not to have my attention drawn to it at all.

Somewhere I read that Mrs. J. Heath is like Ophelia, only larger. Mine is nothing like Ophelia and is smaller. The bloom reminds me of Wilhelm Kordes, not quite so highly colored. *Query:* What did I get when I bought Mrs. J. Heath? *Answer:* What's the difference? You have an orange, copper, salmon, crimson, creamy yellow bloom that is mildly fragrant, not very free-flowering, and not very vigorous; none such ever having been described in a catalogue, why not name it Sunstar, Kordes, Heath or Roberts? Shakespeare's answer may stand.

In questioning my friends, I find few who care for white roses. One says: "Druschki is a dead one, a marshmallow made of chalk, pretty and dumb." Many of us feel the same inclination to boycott a rose entirely lacking in fragrance. Let us have all the color possible, but our olfactory nerves also demand stimulation. The florist's White Killarney would be more popular with more perfume. I have enjoyed Mme. Jules Bouché for her delicate incense more than for her color. I have great hopes for the promised fragrance of Marcia Stanhope.

We are not going to have mildew and black-spot forever. Some day scientists will infuse resistant blood into our Hybrid Teas to furnish immunity against these pests. Won't that be a grand and glorious sunrise! "When?" Don't be impatient, the Hybrid Tea family is only late Victorian. We can afford to wait until 1950 to realize such a dream. In the meantime, our rose will gradually lose its thorns, its fragrance will be enhanced, and its insect enemies put to rout. The coming days of rose-lovers will be fair, fragrant, and full of triumphant joy.

The Call of the Wild

By ALBERT CHANDLER, St. Louis, Mo.

LET me raise one voice for our native species in preference to the pampered favorites of gardens. Our wild roses are good campers who tuck themselves in comfortably, bringing into the garden an atmosphere of untamed nature, and there present new and interesting problems.

There is a huge rose growing near irrigation ditches and dry water-courses in our western deserts, its canes bristling with spines like a cactus, so long and closely set that no starving animal can bite into the bark. Not one-sixteenth of an inch is unarmored. This rose does well for me near St. Louis, Mo., unwatered, untended, and unharmed. Can any Hybrid Tea raise such a background of suggestions at a glance?

At the other extreme is the shade-loving little rose of northern forest trails; if found in a clearing, it is only along the deep shadows of the south margin, never venturing into the open sun. It has pendent pods in the classical form of ladies' eardrops, blood-red, and nearly an inch long. I once counted twenty-two on a plant only 18 inches high. This is *Rosa acicularis*, and it is offered by some nurserymen. It may prefer neutral or mediacid soil, for tests in its habitat have given such reactions, and plants I set out in Missouri clay died. Others recently planted in an acid fern-bed seem promising. What cultivated rose will thrive among pines and moss?

The American wild roses fall into three groups—climbing, shrubby, and dwarf. Those east of the Rockies have vegetative features distinct enough for observation in the field and more permanent than the organs of the flower with which botanists begin their laboratory analyses.

There are only two wild climbers; one of them is an escape, but too common and conspicuous to ignore here. These climbers are the Prairie rose (*R. setigera*) and the Cherokee rose (*R. lævigata*). From the first came Beauty (or Queen) of the Prairies and Baltimore Belle, and, perhaps, American Pillar; from the second came Silver Moon—all progeny to be proud of. Why not bear in mind the pedigrees of our cultivated plants and extend our gardens as far as our roving memories can reach?

Habitat will help to distinguish these climbers, the exotic Cherokee being limited by Mason and Dixon's line; it clambers all over low trees near the Gulf, and always has green, rather heavily armed stems. We see it from train windows while going to our winter resorts. The less rampant Prairie rose canes become ruddy along exposed upper surfaces, sometimes maroon all around. The leaves should suffice to complete the identification. The Cherokee leaf-spray terminates in a leaflet much larger than those under its shoulders; it may be likened to an Indian spear-head thrust out beyond two smaller arrow-heads pointing to either side. The Prairie rose also commonly has but three leaflets toward its tips, five lower down, all about the same size. The Cherokee flowers are larger, usually white; the Prairie's, almost always pink. A peculiarity of the Prairie rose, distinguishing it from all other American species, is that its styles are welded together into a single column, although in all our other wild roses the several styles in each flower stand separately, like the bristles of a paint-brush.

The Prairie rose is always graceful, and useful to the gardener in several ways—about entrance gates, along drives and backgrounds, and other positions of semi-retirement. It varies widely, showing four extremes, though all alike have a longer season of bloom than most of the other wild roses. There is a slim sort with wiry stems, blooming in larger clusters than the others; a fleshy sort with plump stems and coarser leaves, both these having small pods; the third sort has great red-maroon pods like the best of canning cherries, and big stems that are ruddy also. These three are heavily armed and love full sun during as much as half the day, though they will thrive in partial shade so far as they go without attaining their full stature. All these thorny sorts are common along roadsides, triumphing over barrenness and drought or wet, and making an old rail-fence beautifully picturesque. The fourth sort is very rare, growing along creeks in the shade, with green stems of great length and almost or entirely thornless. This is a distinct variety; the other variations may perhaps be produced by soil-conditions and location. All are sturdy enough to withstand pests and diseases, though they are not free from such attacks, the second sort—through whose stipules the midrib is often a

striking blood-red—commonly being infested with tiny pith-borers of the rose-sawfly which appear to do no damage, though fear of such inroads upon tender garden varieties should make one watch this sort about the rosery.

Among the shrubby roses, we may often identify *Rosa blanda* merely by the shape of the bush—leggy, erect, rather graceless, and top-heavy, like a high bush cranberry, from 2 to 4 feet high, according to climate, growing taller toward the Ohio river than in its northern range. All other wild rose bushes of similar height, while lacking the fountain-like symmetry of a *Spiræa vanhouttei*, tend toward the form of *Forsythia suspensa*. Almost invariably, *R. blanda* is found in clumps, as it spreads by suckers. The name sometimes applied to it, the Smooth rose, and the habitat usually assigned, rocks and rocky shores, are both misleading; it is found in many other places, in fields and open forest clearings, and the lower canes are not smooth. The upper parts of the wiry canes are red and unarmed—in the fall they resemble red-stemmed dogwood; but the leggy lower part becomes dull and dark, almost black, covered with bristles, and sometimes splotched with white specks that resemble mildew. Its value lies in its early bloom, only a few days after Hugonis. In the fall a clump may be hidden by dahlias, for the leaves become dingy by the first of September. Like a poor relation, this rose will thrive on neglect and adversity, though sometimes infested with spiny and globular galls, caused by small hymenopterous insects, *Rhodites bicolor* and *Rhodites globuloides*. Even under a winter's snow its thickets can be recognized, not only by their upstanding, defiant attitude, but by the crop of globular pods, with sepals sometimes retained; these may thrust upward, almost parallel, to make the pods look like the feathered balls with which children play at battledore and shuttlecock.

Go to another locality for the Swamp rose, with as many aliases as a criminal. Rendered into Latin literally, it became the *Rosa palustris* of Marshall; it is also *R. carolina* (Rehder), alias *R. corymbosa* (Ehrhart), alias *R. pennsylvanica* (Michaux). When scientists busy themselves heaping up a Tower of Babel with confusion of tongues, it is time to accept the language of the people. Let this be the Swamp rose.

Go into a northern marsh where you have to step from hummock to hummock, which sink like feather-beds, and in an opening surrounded by tamaracks and arborvitæs, among pitcher plants and purple fringed orchis, with tall iris and cat-tails behind, the Swamp rose will be found blooming as late as September beside bushes of kinnikinic, both showing buds, blossoms, and the season's pods all together—and you can only think of Souvenir de Claudius Pernet as a manufactured chromo.

The Swamp rose does not keep within the bounds of its own peculiar domain, but advances scouts far into its neighbors' territory. Isolated specimens in debatable land give us pause, for in the same locality we find scouts of the next two roses we shall mention—all wanderers. Soil-preference has this importance, that the bush reaches its full stature only where it feels at home. The Swamp rose will grow 8 feet high in a marsh, but venturing into the poorer uplands may not rise above 2 feet. As the other shrubby roses thrust forward into uncongenial soils are no sturdier, we must find a way to segregate the larger species from the true dwarfs.

No other feature of a large rose bush is more graceful than its hooked thorns. Cut a stout strip of bark bearing a thorn at the top, and you will have, in miniature, one of the fanciful ancient battle-axes. The upper edge is a perfect Hogarth curve; this is emphasized by the concave lower margin. These graceful thorns are conspicuous on the climbers, and, in a somewhat attenuated form, appear among more numerous straight spurs on *Rosa virginiana* (Miller), alias *R. lucida* (Ehrhart), and on the Swamp rose and on the Pasture rose, the latter being *R. carolina* (Linnæus), *R. humilis* (Marshall), *R. parviflora* (Ehrhart), and *R. lyoni* of somebody else.

The dwarfs have only straight thorns or spines. We may, therefore, mark off the true dwarfs from any small wanderers of our shrub roses, even though the latter will have bristles among their hooked thorns. Parenthetically, it must be remembered that the wild climbing roses have even more shapely thorns, and those of *R. blanda* are straight. And one way to distinguish an imperfect *R. setigera* among the shrubby roses is to notice that the thorns of the latter are usually in pairs, while the climbers' thorns are not coupled and are without bristles

among them. Recapitulating, the dwarfs have straight spurs, the climbers have handsome hooks, and the shrubby roses, except *R. blanda*, have both.

Now, to distinguish the Swamp rose, the Pasture rose, and *R. virginiana*, the three commonest shrubby roses, one from another. They are botanically akin, all may rise to a height of 5 to 6 feet, and all are found in every state from Maine to the Gulf and far out on the Plains. We shall first notice the leaves, and in doing so we must always consider a dozen or more, and imagine a composite or ideal specimen.

The Swamp rose leaves have fine, sharp teeth; the other two have coarser teeth. If a leaf has such coarser or blunter teeth, and is shiny in midsummer, it belongs to *R. virginiana*, for the mature Pasture rose leaf has a dull upper surface. Laying a dozen or more leaves of each of these roses in separate groups before us, we shall see that those of *R. virginiana* are the broadest—i. e., as an average—and those of the Pasture rose are the narrowest and feel thinnest between thumb and finger. The youngest foliage of the Swamp rose is light green and stands up folded like a fan; that of *R. virginiana* is dark green and not so folded; that of the Pasture rose is dull red and flat.

In good specimens, the general appearance of the bushes is unlike. The Swamp rose is a pretty thick shrub; the other two are thinner. The ends of the ruddy upper branches of the Swamp rose tend to zigzag from bud to bud, in extreme cases suggesting knot-weed; its autumn foliage is more red than yellow. The commonest is the Pasture rose, which loves full sun and does best on dry soil and on rocky slopes, where it may sometimes rise to the height of a man, but is usually a sprawly imitator of the blackberry. It makes great thickets to tangle the legs of a quail-hunter, and is subject to black-spot in wet seasons, even miles from civilization. *Rosa virginiana* does best where the soil is fairly moist, is covered with round red pods, and will thrive in partial shade.

The five more familiar dwarf roses east of the Rockies have such restricted habitats that we seldom have more than one or two possible claimants of the soil. Thus, *R. nitida*, the Shining rose of New England, often needs no other identification. This and the Texas rose (*R. foliolosa*), found in Arkansas,

Oklahoma and Texas, are the only dwarfs whose seeds stand in the heps, like coins in a pocket, all resting on the bottom to which they are attached; the seeds of the others are like shot in a bag.

Rosa heliophila, alias *R. pratincola*, with the widest range, has a camel's strange preference for soils; it should be called the Bedouin rose, frequenting dry and rather barren wastes from Texas north into Canada. You will never mistake this for *R. acicularis*, which seeks moisture about the Great Lakes and along the Canadian border to Montana and up and down the foothills of the Rockies. It has a straggling growth, the root lying just under the carpet of pine needles or other mold, and sending up one and another single wiry vertical stems at distances of a yard or more. Though said to rise to great heights in Siberia and Alaska, in continental regions it is only about 18 inches high, with solitary flowers and pear-shaped pods.

Rosa woodsi may occasionally rise to 3 feet and sometimes has a few slightly curved thorns. Its range is from Canada to Colorado and Missouri. *Rosa blanda*, which its larger specimens resemble, does not extend beyond the two borders of the Mississippi. It may be distinguished from *R. heliophila* by noticing that at the base of each leaf-stem appear a pair of little wings, or "stipules," curved outward, forming, together, an elongated lyre with the leaf-stem starting upward through it. In *R. woodsi*, spines jut out beneath all these leaf-stems, a little longer than the bristles elsewhere along the canes, but on *R. heliophila* there are no such infra-stipular spines.

With these aids to identification, it is humiliating to make the confession that all rules fail with some individual specimens. There is a rose of the sand-dunes about Lake Michigan which is none of those discussed above; it has big, round, yellow pods like sweet cherries. I have never been able to identify it. And I am not sure of the identity of a perfectly thornless large wild rose of which I have found nearly a dozen specimens scattered over a range of about a hundred miles south and west of St. Louis. To succeed in tracing any of the wild roses to their lairs in the botanies, you must have the inordinate curiosity of one who wants to know what every rose is wherever he finds it—that, and practice.

Kansas Roses

By OTTO GREEF, Pittsburg, Kans.

MY FIRST roses, planted thirty-seven years ago, were La France and Clotilde Soupert, and none that I have ever tested has proved hardier, longer-lived, and more prolific than Clotilde Soupert. Its full-petaled, light pink, fragrant flowers still have a charm for me.

Gruss an Aachen and Gruss an Teplitz rank among the hardiest, long-lived roses, and are two of the most desirable decorative varieties. The novice with no experience at all can hardly fail to succeed with these and the Radiance family.

Wm. R. Smith is one of the old reliable roses that always "make good." It is mislabeled by some nurseries as Charles Dingee and by others as Jeannette Heller. It combines many superior merits both for garden and cutting.

Los Angeles, budded on Gloire des Rosomanes stock, is coming to its own, and we may expect it to become one of the most popular roses for the up-to-date garden.

Ophelia, that wonderful mother of a long list of sports, is one of the most desirable roses of its color, and a full collection of its progeny lacks only a good yellow to complete a splendid assortment.*

Nothing in the entire range of rose tints surpasses the color of Mrs. Charles Bell, with its exquisite duplication of the same delicate pink found on the inside of a seashell. Why it does not stand next to Radiance in popular favor is a mystery.

Francis Scott Key deserves a place in every collection, as an ideal to strive for in its perfection of color, size, and form, in spite of its aggravating deficiencies.

Lord Calvert (Radiance × Hoosier Beauty) is the most nearly perfect red rose, and as its hardiness has proved equal to Radiance, it seems destined, some day, to displace Red Radiance. With the beautiful shape, the pointed bud, the delicious fragrance, the dusky, velvety red of Hoosier Beauty, and the hardiness, free-blooming habit, and size of Radiance, and having the same cutting value, it combines practically all of the perfect points of a model rose.

*How about Roselandia? and what is the red one?—EDITOR.

Until a better-acting deep pink has been developed, Columbia, with all its faults, will hold first place in my affections. Its fine buds, unfading color, large flowers, delightful fragrance, lasting qualities, and long, thornless stems are hard to surpass.

Lady Ursula also fills an important place and has made good in a great diversity of locations as a decorative rose.

Rose Marie has proved of considerable value, with enough good points to make it desirable where more shades of pink are wanted.

Mme. Edouard Herriot does not seem nearly so healthy as Padre, with its wonderful luxuriance of bloom, stronger stems, and uniquely notched petals—an attractive ensemble, while its color is richer, making it a decidedly better rose.

Souvenir de Claudius Pernet has proved its value as a hot-weather plant. It needs lots of sunshine to stimulate it.

Marie Adelaide, Grande Duchesse of Luxembourg, in spite of the handicap of its lengthy, royal title, is a very beautiful rose, of good habit, but not a very free bloomer.

Mme. Alexandre Dreux is one of the best in my collection because of its shape, fragrance, and colors (intermingled orange and yellow). It appeals to me more than Rev. F. Page-Roberts.

Lady Margaret Stewart is equal, if not superior, to Rev. F. Page-Roberts, and rounds out a quartet of really valuable yellow roses.

Other roses which appeal to me on the basis of their individual merits are: Mme. Segond Weber, Edel, Kaiserin Auguste Viktoria, Sensation, and Château de Clos Vougeot.

Zephirine Drouhin is a wonderful climber, and I cannot understand why it has been kept in the background during the many years since its introduction. In spite of a very unfavorable fall and winter season, my five-year-old plant showed very slight injury from freezing, when others nearby suffered seriously. In size, color, fragrance, and freedom of bloom, it was at the head of the list, and won praises from every visitor who saw it in its perfection, and its season of bloom was prolonged several weeks after the main crop was gone.

The three Lovett sisters, Mary, Bess, and Alida, are usually very desirable, but Mary (the white one) seems to lose its buds from freezing and it fails to show many of them.

Mary Wallace is glorious in color, with a profusion of flowers.

Paul's Scarlet Climber and Dr. Huey both find admirers for their distinct contrasting colors.

Emily Gray froze to the ground last winter, and Star of Persia proved a complete failure, having had no flowers since it was planted two years ago.

Jacotte is beautiful in different shades of rose-pink, orange, and yellow, and seems fairly hardy, although slow to get of sufficient size for many flowers.

Papa Gouchault is a very great improvement over Crimson Rambler, darker in color, but a wonderful bloomer and grower.

A Rose-Garden in Arkansas

By DYMPLE B. JOHNSON, Fort Smith, Ark.

EACH of the eighty varieties of roses I've grown has its own exquisite individuality, and I adore all of them. The Damask, the Japanese, and the Arkansas Rose make my imagination go galloping through history and science. The ability of these roses to stay true to type throughout the ages, no matter what the environment may be, is the most vital lesson in persistency I have ever learned. Among the roses developed by men, a few are more interesting to me than others because of their behavior in my garden.

Mme. Caroline Testout, from a Portland (Ore.) garden, behaves as if it were in its old home. For weeks its vivid pinkness stops hundreds of people as they pass the garden. Dr. W. Van Fleet, with its masses of bloom, makes breath-taking loveliness week after week in the spring. Then, all summer long, no matter how hot or dry or wet, each leaf shines as if it had been waxed and polished daily, making such a comfortable green spot for light-strained eyes that I often wish that Dr. Van Fleet's ambition to have a bush of it in every yard might be fulfilled. Gainsborough, Souvenir de la Malmaison, Hermosa, Pink Daily, Mme. de Watteville, Meteor and Gruss an Teplitz are so full of the joy of living that they just keep telling the world about it with blooms of old-fashioned deliciousness of form and color from May until almost Christmas.

The Radiances, Souvenir de Claudius Pernet, Sunburst, and

others of that type, justify their places in the garden, of course. But the preciseness of their growth and bloom makes me think of the artificial loveliness of beauty-parlor addicts.

These roses are all fascinating, but Climbing Cécile Brunner is my best beloved. My three climbers make luxuriant growth and they are practically disease-resistant. The plants are masses of blossoms all of May and June and bloom continuously through November and sometimes until Christmas. It is a splendid, satisfying feeling to help a rose bush grow and produce so much loveliness, but it is a far keener joy to create happiness in people by giving them the blooms. I am intensely interested in folks, and my joy in them has been increased greatly from getting so many different reactions to the same rose. Regardless of age, personal, social or economic conditions, the Cécile Brunner seems to be the best loved of all; because of its physical perfection of form, color, and delicate odor; or maybe its tiny sweetness appeals to that tender protective instinct we all have for babies. I actually give thousands of Cécile Brunner roses away each summer, and out of many and varied experiences with different kinds of folks, a few are etched in my memory with cameo-like clearness:

A pretty little girl, kissing the buds and whispering to them: "You're me, you're me!" and at the moment they did seem so;

A young girl whose sweetness and daintiness were brought out with a corsage of Cécile Brunners, lilies-of-the-valley, and forget-me-nots, although she was wearing a jazzy dance frock;

An awkward, hard-boiled, swaggering teen-age youth, whose knowing eyes grew misty and sweet as he stood in the alley and looked at the masses of tiny blooms. Of course, he was given all he wanted;

An elderly woman who sang snatches of happy girlhood songs all the time a tight, little, colonial bouquet of Cécile Brunners and clove pinks was fresh in her home;

An old, old negro, all crippled with rheumatism, who stepped a little spryer when he was given a bunch of these roses. As he gently caressed the dainty blooms with his gnarled old hands, he mumbled "Them's God's chillun sho' nuff."

The first time Cécile Brunners were used here as boutonnières, at a Chamber of Commerce dinner, with almost auto-

matic precision, one hundred and fifty men picked up their buds, looked at them closely, smelled them, pinned them on, and turned to their neighbors with an astonished "Why, they are real!"

While a manager of a public utilities company has a bowl of Cécile Brunner roses on his desk, he forgets all about hiking the street car fare. Doesn't that put this rose in the miracle-working class?

These are only a tiny fraction of the lovely, interesting experiences that have come to me through Cécile Brunner. How could I possibly love any other rose so well?

Teas in the South

By R. N. DAY, New Orleans, La.

EDITOR'S NOTE.—Consistent readers of the Annual will remember Mr. Day's interesting experiments with fertilizers reported in an earlier Annual. His statements in regard to the value of Teas in New Orleans corroborate the contentions of eminent southern rosarians, particularly Captain Thomas who has vigorously advocated their use in the South. See Mr. Bosanquet's remarks on the same subject in the following article.

MANY years of rose-growing in New Orleans have reduced me from the high estate of a rather sporty experimentalist to the low degree of a mere pot hunter. In the earlier stages of my rose career, I was fired with the enthusiasm of the zealot and a wild ambition to try every type and variety of rose on the market. With my little bow and arrow I hunted all the new "suffusions of coral underlaid with salmon and deepening into scarlet, or what have you" with which the catalogue writers tempted me. As the years went by I tired of nursing sickly plants; I became bored with the spectacle of half-dead, defoliated, and bloomless rose bushes, and so the list of my favorite roses includes only those which deliver the goods generously from March until December inclusive.

Whoever attempts to grow Pernetianas, Rugosas, or Hybrid Perpetuals along the coast of the Gulf of Mexico is wasting most of his time. He may get a nice splash of bloom in the spring, but that is about all. This part of the country is primarily a Tea rose district in which Hybrid Teas grow within certain limits; so it may be inconsistent for me to give first place among all the roses to Francis Scott Key. But why should a rose-grower hope to be consistent?

HYBRID TEAS

Francis Scott Key is my favorite because it has "the punch" in growth, foliage, petalage, stem, and color. It is not a free bloomer, but a consistent worker, producing all the season. Its only drawback is lack of fragrance.

Radiance, Red Radiance, and *Mrs. Charles Bell*—the Radiance group—are favorites because they furnish a dependable backbone for any garden, and if one has nothing else they furnish a good assortment of colors and a reliable source of supply.

Jonkheer J. L. Mock. This big, striking rose has two colors, pale pink on the inner side, and darker pink on outer side of the petals, and lots of individuality. It opens too quickly and doesn't last.

F. R. Patzer. An unusually fine shade of pink of fine lasting quality and a good producer throughout the season. It looks almost as much like a fine carnation as a rose.

Rose Marie. A very free spring bloomer and fair bloomer all season. Strikingly fine in bud, and fragrant.

Mme. Léon Pain. Just a pink rose, but a steady worker with strong stems of medium length. Thoroughly dependable, but not much as a plant.

TEAS

Mrs. B. R. Cant. Grows vigorously all season and blooms continuously. Not so much character but gives fine big blooms of typical rose color; also blooms well in the fall when most of the roses are off duty.

Alexander Hill Gray. A very attractive, upright bush with large, lemon-yellow blooms. A good worker throughout the season.

Duchesse de Brabant. An unusually free bloomer and a fine decorative rose for the garden. Fair for cutting purposes and a well-shaped, pleasing plant.

Mme. Lambard. Much the same type as Duchesse de Brabant, furnishing cut-flowers all season. It is such a free bloomer that it adds much to the appearance of the garden.

Marie Van Houtte. A free bloomer which does fine work after cool weather comes. It is vigorous and healthy but inclined to sprawl, so the plant is not as attractive as it might be, yet I like it because of its vigor and fine cream-colored flowers with tints of rose which come on long, stiff stems, fine for cutting.

Mlle. Franziska Krüger. An extremely attractive bloom, either in the bud or fully open. I like its pastel shade and its typical Tea rose character.

The Cochets—White, Pink, or Red. Every southern rose-grower has some of these because they are so easily grown and give such pleasing bloom. They have a weak neck, but the bloom is large, of good color and form.

Anyone growing Tea roses should remember that while the Tea roses do better here than any other class, they should be purchased from southern growers who propagate them outdoors. The Tea roses which I have bought from northern nurseries were all grown under glass. Consequently, the northern-grown Tea rose is usually rather a weak sister and without much vitality. This suggestion applies only to the Teas. Hybrid Teas from the North do just as well here as southern stock.

PLATE IX. AGNES, the yellow Rugosa
Colored illustration by courtesy of Bobbink & Atkins

Favorite Roses in Central Florida

By LOUIS P. BOSANQUET, Fruitland Park, Fla.

I AM especially fond of Tea roses, and they grow so much better in central Florida than the more fashionable Hybrid Teas, though they are not so good for cutting on account of their shorter stems. The old favorites are still the best, to my mind, for, unfortunately, there have been few new Teas of late years, but I am old enough to love old friends best anyway.

In a Florida garden, what is more beautiful than a large bush of Duchesse de Brabant, with its delicate pink, cup-shaped flowers covering the whole bush? Her lighter cousin, Mme. Joseph Schwartz, seems to be almost forgotten these days, but is almost as desirable. Marie Van Houtte, cream flushed with pink, has more cutting value than Duchesse de Brabant; it also makes a good big plant. Alexander Hill Gray and Mrs. Dudley Cross in this climate are very similar to Marie Van Houtte.

White Maman Cochet and pink Maman Cochet are, perhaps, the best cutting Teas, well shaped, full, and hold their form well. Mrs. B. R. Cant is always satisfactory.

Good red Teas are few and far between. Freiherr von Marschall is one of the best; its growth is good and its buds are well formed, and of good color; it blues, however, somewhat when open. This year, I am trying Princess Ghika. It is a very free bloomer and its color, when in bud, is as good as Freiherr von Marschall, but it does not seem quite as double or as large.

Devoniensis is the most rampant climber of any rose I have. Its buds, with their thick petals, are especially charming. Reine Marie Henriette is another satisfactory pillar rose, and it keeps its bright cherry color so well.

The Bourbons and Chinas are similar to Teas, in many ways, and are equally decorative in the garden. Some of them, like Hermosa, have been beloved for many years. Louis Philippe is more often seen in Florida gardens than any other rose. Fabvier has recently been resurrected from an almost forgotten past, and is much like Louis Philippe, only its almost single flowers have a white center. Burbank makes a large plant, and its pink flowers are like large Hermosas. Souvenir de la Malmaison, with its very double, flesh-colored flowers, is quite out

of fashion these days. Its stems are, unfortunately, too short to have much value for cutting, at least in this part of Florida.

But few southern gardens are to be found without some of the Noisettes, and of these, Maréchal Niel is still the most famous. For some reason or other, it is much harder to grow than it used to be. Perhaps it has run out, or, more likely still, fungus troubles are worse than they used to be. But no other rose has the same fragrance as Maréchal Niel, which may partly come from one of its parents being a Musk. Other Noisettes that climb well are Lamarque, Solfatare, Rêve d'Or, and Chromatella. Of these, Rêve d'Or is especially strong.

Another class, the Banksias, have many charms. They are strong growers, thornless, seem immune to disease, and although they bloom only once a year, their small, double flowers last for some weeks, and, unlike too many modern roses, are sweet-scented, with the odor of violets. They should be in every southern garden, but I regret to say, are not.

In William Paul's "The Rose Garden," published in London in 1863, there is an account of several Banksias not grown in the South. Besides the white and the yellow now grown here, we find Jaune Serin, said to have flowers of bright yellow, larger and deeper than the common yellow; Jaune Vif, bright yellow; and Odoratissima, white and fragrant. These Banksias are not catalogued in "Standardized Plant Names" so they may be lost.

In the same book there is an account of the growth of several Banksias. One white Banksia, in the Jardin de la Marine, Toulon, France, in 1843, had a trunk 2 feet 4 inches in circumference at its base. It divided into six branches a little distance from the ground, the thickest of which was 12 inches in girth. The branches covered a wall 75 feet long and 15 to 18 feet high, and would have covered more but were severely pruned to keep within bounds. It was said to produce from 50,000 to 60,000 flowers a year. At Caserta, Italy, a white Banksia climbed to the top of a poplar tree 60 feet high. At Reading, England, a yellow Banksia produced, in one year, 2,000 trusses of flowers!

If more of these roses of days gone by were grown now, our gardens would be that much brighter, and certainly more fragrant, for too many of our modern roses lack scent. What is a rose without scent, anyway?

Roses I Have Grown and Loved

By HENDERSON L. LANHAM, Rome, Ga.

MY MOTHER loved flowers and "had a way" with them. They responded to her love and care by growing luxuriantly and by rewarding her with lovely blossoms. My paternal grandfather, too, was fond of flowers, especially roses, and I have marveled at his success in growing them in the shade of trees and in competition with their roots. I believe now that the shade was good for them, but for the life of me I can't make my roses compete successfully with tree roots. My first attempt at growing roses was when, as a mere lad, I stuck a cutting into the ground, put an inverted fruit-jar over it, and watched it grow, and finally bloom. It is now a large plant, almost a tree, for certain Tea roses make tremendous growth on their own roots in the South.

But it was not until about ten years ago that I became deeply interested in roses. Since that time I have grown many kinds, from many growers, and I set down the results here in the hope that they may be of benefit to others who are starting to grow roses in the South. And let me say before I go on to a discussion of varieties, that nothing in my life has brought much more reward in the way of happiness and sheer delight than the growing of roses. Of course, there are disappointments and failures, but one hour in my rose-garden on a May morning, with the sun just touching each dewdrop with its magic wand and setting every bush aglitter with a thousand dewdrop jewels, amply repays for all the disappointments and failures. If you would enjoy your roses, don't miss them at dawn.

In this section (northwestern Georgia) we have a heavy clay subsoil, ideal for roses, and we have enough cold weather to keep them dormant two to three months each year. While we have a few very cold days every year, with an occasional day and night when the thermometer hovers around zero, there is little damage from cold, even to the tenderest varieties. But the alternate freezing and thawing of early spring often kills newly set plants which have been coaxed into putting out their buds by a few warm days. Planting is best late in March, and I have had best results with plants from nurseries farther north.

Radiance and Mrs. Charles Bell are undoubtedly the best roses for the amateur. They do well on their own roots or when budded. And what could be lovelier than the soft salmon-pink of Mrs. Charles Bell? The color is as pure as is found in that matchless peony, Walter Faxon, and Mrs. Bell blooms just as freely as Radiance. Red Radiance is good, too, but I cannot grow enthusiastic over its color.*

Etoile de Hollande is a fine red, and grows and blooms well. Climbing Chateau de Clos Vougeot is the best new red rose I have tried. It grows vigorously, has lovely foliage, is little troubled by black-spot, and blooms profusely, even during hot weather, which cannot be said of many. Gruss an Teplitz is wonderful as a hedge, but is too large for the regular rose-garden. Budded on Multiflora, it grows 12 feet high and blooms constantly. Its one bad fault is its susceptibility to black-spot, which spreads readily to other plants in its neighborhood.

Among the pink roses other than Radiance I have found Maman Cochet and Miss Cynthia Forde best. Dame Edith Helen was fine in the spring, but was very stingy with her blooms thereafter. Mrs. Henry Bowles, Mrs. Henry Morse, and Mrs. A. R. Barraclough I have not been able to grow successfully. Mme. Butterfly is lovely, but not vigorous, and Betty Uprichard is not full enough for our hot days. The fact of the matter is that there are no roses to compare with Radiance and Mrs. Charles Bell for all-round desirability and dependability. My friend, Mr. Sam Graham, who has been so successful with peonies here, says that the Killarneys are his best roses.

Other than Frau Karl Druschki, there is no good white rose, except Climbing Kaiserin Auguste Viktoria, which is far superior to the bush rose of that name. White Maman Cochet is good at some seasons, but has the fault of weak stems.

The best yellow rose, so far, is Mrs. Erskine Pembroke Thom. I believe I have not seen a more symmetrical plant, and the foliage is almost proof against black-spot, which is our greatest rose enemy. The blooms are a true yellow and are produced freely, their only fault being lack of petals. Mrs. Thom holds her color in hot weather better than most yellow roses. Souvenir de Claudius Pernet is practically worthless outdoors in the

*Perhaps Mr. Lanham has the wrong Red Radiance. The Gude sport is the best.—EDITOR.

South. The first blooms are greenish white and there are only a few good yellow ones late in the summer.

Roselandia is fine, but the color is hardly yellow—it is more nearly tan. It grows and blooms well. Ville de Paris is good, but too thin. Rev. F. Page-Roberts is one of the loveliest of all, and since I have grown it on Multiflora it has done well in every way. I have had it on Ragged Robin, but it did not do so well. I tried Lady Margaret Stewart but prefer Page-Roberts, which it resembles very much. Souvenir de Georges Pernet gives a few marvelous flowers, but its growth here is not strong, and it is shy in blooming. The same is true of Wilhelm Kordes.

Among the Polyanthas, Ideal, La Marne, and Chatillon are my favorites. In early spring, with an edging of *Phlox Laphami*, La Marne is a wonderful sight. It fades during our hot days of summer, but persists in blooming. Chatillon fades less and is more attractive even when faded. Ideal is undoubtedly the best red I have tried.

Paul's Scarlet Climber, Dr. W. Van Fleet, Dr. Huey, and, in some seasons, American Pillar, are the best of the climbers. Silver Moon, of course, is good. Among the older roses, Gloire de Dijon is fine, but subject to black-spot. And Lady Banksia (yellow) is lovely as a background in early spring.

In this section of the South, most roses do well on their own roots, but I am too impatient to wait for their slower growth, so prefer to buy two-year, field-grown, budded plants.

Plenty of animal manure, well mixed with our good clay-loam soil, is all that is necessary in the way of preparation. No drainage is necessary, but plenty of water applied at the roots will carry the plants through our dry summers and give us marvelous blooms in October and November.

There is little trouble from mildew here, but black-spot is hard to combat, and the aphis are troublesome in early spring. I believe late frosts kill more plants than any other one thing.

After all, I believe my favorites are Mrs. Charles Bell, Rev. F. Page-Roberts, Mme. Butterfly, and Etoile de Hollande. Add Radiance, and you have five which are hard to beat.

Surely the joys of rose-growing far outweigh all the troubles and disappointments; and one morning in the rose-garden, just after dawn, is worth all the trouble the garden has cost.

The Roses of Spartanburg

By MRS. L. J. BLAKE, Spartanburg, S. C.

EDITOR'S NOTE.—Mrs. Blake, a true gardener, tells of the roses of a section with wonderful rose possibilities which few have realized. The facts of the situation are here clearly stated. May many more follow her leadership!

I GREW up with the pleasant conviction that the Piedmont Section of South Carolina is the best rose country in the world, and that Spartanburg is the rose center of the Piedmont Section. Our old garden, with its Teas, Bourbons, Noisettes, and Hybrid Perpetuals deepened the conviction that Providence smiled on Spartanburg and blessed us with roses. It is only within the past few years, when the enthralled slavery to certain aristocrats among modern Hybrid Teas, combined with the sincere determination to have the best blooms that work, love, and close attention could produce, that a doubt has crept into my conviction. The effort to keep blooms of certain cherished favorites from balling, and, alas, the effort to keep certain bushes decently clothed with leaves, caused my mind to waver about this special blessing of Providence.

Yet something of the old conviction remains. For in this Piedmont Section, at the foot-hills of the Blue Ridge Mountains, grow the hardy roses of the North and the tender roses of the South. Hybrid Perpetuals and Teas, Rugosas and Noisettes live in happy companionship.

In our climate, spring is more menacing to roses than winter. In colder climates, spring is shy and discreet; here she is so imprudent and impetuous that she pushes winter aside and rushes upon the stage before it is time for her part to begin. Sometimes winter in grim mood returns, and I know few pictures of Nature more distressing than ice or snow clinging to fresh young rose leaves.

One cause of our rose success is red clay. All types of roses thrive in this. New roses are opened under shelter, put at once in a slush of red clay, planted in holes already prepared, and then, instead of "mellow top-soil" worked gently about the roots, we pack the roots down with honest red clay. That mellow top-soil, mixed with well-rotted cow-manure, is used to fill the hole. And these holes should be dug deeper than the modern

hole of two spades depth, for many roses in our climate grow larger and the roots strike deeper than in colder climates.

As to the time of planting, I maintain that in my climate it makes no difference—go to it from October to April! The main point is to plant roses. In March, four years ago, I planted seventy-five Hybrid Teas. In May they were in full bloom, and our May roses in full bloom laugh at rules and regulations, books and controversies. The only way I can differentiate between roses planted in the spring and roses planted in the fall is to consult my garden book.

No southern garden is complete without Tea roses, and none is complete that stops with Tea roses. They are the foundation of the garden and add infinite grace and charm. I can give no list of Teas without starting with two roses that are not Teas but are always used with them in our gardens. The first is Souvenir de la Malmaison, an old Bourbon sent out by Béluze in 1843—soft pink, very double, very sweet, and very desirable. The second is Old Blush (Parsons, 1796), a Bengal, with flesh-pink, loosely formed blooms, in sprays.

Here are my "favorite dozen" Teas:

Alexander Hill Gray. Soft yellow; fragrant; double.
Duchesse de Brabant. A precious, old-fashioned rose; quaint, cup-shaped, pink blooms.
Etoile de Lyon. Large, double blooms of gold.
Maman Cochet. Rich pink, double rose, always in bloom.
Marie Van Houtte. Large yellow flower, tinged with pink.
Mme. Constant Soupert. Perfect soft yellow buds.
Mrs. B. R. Cant. Sparkling pink, brighter than the usual Tea.
Papa Gontier. Another rich pink rose of striking color for a Tea.
Perle des Jardins. Soft yellow; fragrant; double.
Safrano. Lovely buds of sunset coloring.
Souvenir de Pierre Notting. Fragrant, double, orange-copper.
White Maman Cochet. Strong, double, white rose, outer edges tinged with pink.

These old-fashioned roses are deservedly popular in our southern gardens, not only for their beauty and fragrance, but because they resist disease better than Hybrid Teas.

My next-door neighbor, having a rose-garden of Teas and Bourbons, with their soft, delicate coloring, planted a bed of a hundred Red Radiance with the frank intention of getting the best red rose for the least trouble. He succeeded. In the background is a fence with a planting every 5 feet of climbing Reine

Marie Henriette, in color so like Red Radiance that the impression is given of a continuation of the bush roses. Dancing over the fence, they seem bursting all bounds in joyous abandon. No hyper-sensitive Radiance rose critic could withstand that rush of color!

But why stop with Radiance roses? No gardener knows the real sport of rose-growing and no garden the real beauty of roses without a collection of Hybrid Teas.

Selecting Hybrid Teas is fascinating business. I have never approved of a list made by anyone of a "favorite dozen," and I do not expect anyone to approve of my list. Mine is a list, not of the easiest roses, or of the best bloomers. It is not the preferred dozen of the rose catalogues, or, for that matter, of the American Rose Society. Rose friends, like human friends, must be made for oneself, and the list I give are the roses in my garden which give *me* most pleasure.

Betty. Perfectly formed buds of copper-tinted pink.
Betty Uprichard. Color striking—outside copper, inside silvery salmon.
Eldorado. Lovely, double, yellow rose, tinged with red.
Etoile de Feu. Flaming orange flowers, with glow of pink.
Etoile de Hollande. Large; rich, deep red, gleaming with color.
George C. Waud. Light red; perfect in form, unusual in color.
Miss Lolita Armour. Large, double, fragrant flowers of burnished gold, suffused red.
Padre. A thrilling rose. Brilliant red, with fire in its heart.
Rev. F. Page-Roberts. Long, pointed buds; copper, with blending of red.
Rose Marie. Well-formed buds; lovely, fragrant flowers of gleaming pink.
Souvenir de Claudius Pernet. Pure yellow, no blending.
Souvenir de Georges Pernet. Very large; fragrant; salmon-rose-pink, gold base.

Hybrid Perpetuals have always had their place in gardens of this section, and their place is not in beds with Teas or Hybrid Teas. No real garden can be without a bed of Hybrid Perpetuals. The ones which give me most pleasure are:

American Beauty. Large, double, rich rose-pink blooms of exquisite fragrance.
Anna de Diesbach. Large, double, clear pink, fragrant blooms.
Captain Christy. Fine, fragrant, soft pink rose.
Frau Karl Druschki. Large, perfectly shaped, pure white blooms.
General Jacqueminot. Good form and color in crimson, fragrant flowers.
Georg Arends. Beautifully formed, silvery pink buds and flowers.
George Dickson. Great, double, fragrant blooms of rich, dark, gleaming red.
Hugh Dickson. Large, double, fragrant, brilliant red flowers.
Magna Charta. Very large, double, fragrant, fresh rose-pink blooms.
Mme. Albert Barbier. Full, double, yellow flowers, shaded soft pink.
Mrs. John Laing. Bright pink, richly fragrant blooms of splendid shape.
Paul Neyron. Large, fragrant, double, dark rose-pink blooms.

In my bed of Hybrid Perpetuals I have a way of slipping in plants of Gruss an Teplitz, and when I am asked, "How are you able to keep Hybrid Perpetuals always in bloom?" Gruss an Teplitz and I smile together.

The Polyanthas are being used more and more in our South Carolina gardens. They do not droop in summer nor die in winter, and are gay, friendly little roses that give the garden months of brightness and color. Introduced to La Marne four years ago by Dr. J. Horace McFarland, my enthusiasm has led me to plant many Polyantha varieties, using them for hedges, borders, beds, and window-boxes. Here is my favorite dozen:

Cécile Brunner. Small, perfect pink buds, diffused with yellow.
Chatillon. Large clusters of sparkling pink blooms, tinged with bronze.
Eblouissant. Quilled flowers of gleaming dark crimson.
Evelyn Thornton. Blooms pink, suffused with gold.
Gruss an Aachen. Buds gold and red; large, double pink blooms.
Ideal. Small, brilliant red blooms in compact clusters.
La Marne. Apple-blossom-pink clusters.
Lafayette. Large, frilled, light crimson flowers.
Miss Edith Cavell. Bright red flowers in large clusters.
Mme. Norbert Levavasseur. Bright crimson blooms in strong clusters.
Orléans. Small, bright red blooms with white center.
Tip-Top. Lovely little blossoms of rose and copper.

In selecting climbers, we have here bewildering wealth. Rosarians in the North are criticising us more and more for using their hardy climbers. They tell us to use our own tender climbers of the South. They even tell us that we are aping northern gardens. Well, I am sure that these critics are not held back from using our Teas and Noisettes by any shrinking fear of aping! Tender climbers will not live in cold climates. Hardy climbers feel at home with us, stretching luxuriantly in one year to second-story balconies, and giving us prodigal profusion of bloom. I should like to ape the rose-gardens of the world, so, without apology, I name my favorite dozen hardy climbers:

American Pillar. Single flowers in clusters; bright pink, white centers. One of the strongest and showiest roses.
Bess Lovett. Light red, long-stemmed clusters.
Christine Wright. Lovely shade of pink; long-stemmed clusters.
Climbing American Beauty. Well-formed, fragrant, double, deep pink flowers.
Dr. W. Van Fleet. Beautifully formed, soft pink buds and flowers which can be cut with long stems.

Emily Gray. Large, soft yellow rose of real beauty.
Ghislaine de Feligonde. Lemon-colored flowers in great clusters. Charming because of its many tints and shades of soft yellow.
Jacotte. Flowers of copper and orange tints.
Mary Wallace. Gleaming pink flowers tinged with gold.
Paul's Scarlet Climber. Startling in its intense scarlet.
Silver Moon. Long buds, large, silvery white, single flowers.
Star of Persia. Semi-double, brilliant yellow blooms in loose sprays. A very early-blooming sort.

These hardy climbers give only one season of bloom, but this is true of our two Banksian and of three Cherokee roses, and every rose-lover knows that it is worth waiting a year for the glory of their blooms.

The tender climbing roses come first in our affections. They are old friends, loved all our lives in southern gardens. My best-loved twelve are:

Belle Lyonnaise. Well-shaped, fragrant, yellow rose.
Bouquet d'Or. Large, finely formed, lemon-yellow, fragrant flowers, shaded rose.
Chromatella. Large; double; white; fragrant.
Climbing Perle des Jardins. Large, double; yellow; richly fragrant.
Cloth of Gold. Large; double, deep golden yellow, fragrant blooms.
Devoniensis. The Magnolia Rose. Large, double, creamy flowers, richly perfumed.
Gloire de Dijon. Double; soft pink, suffused yellow; fragrant.
Maréchal Niel. My favorite climbing rose, and I have eighteen in my garden. This rose has perfectly shaped buds and flowers of deep soft yellow, with richer fragrance than any other rose.
Reine Marie Henriette. Good form; bright red; fragrant.
Rêve d'Or. Deep rich yellow; fragrant.
William Allen Richardson. Striking flowers in shades of yellow and orange; fragrant.
Zephirine Drouhin. Finely shaped double flowers of sparkling pink which have the true, rich, rose scent.

These tender climbing roses were introduced in a century that has passed, but in beauty of form, delicacy of composition, charm of coloring they hold their own with the climbing roses of today. They have the added spell of rich fragrance and the grace to bloom in southern gardens from spring until winter.

The old conviction that the Piedmont Section of South Carolina is the best rose country in the world, and that Spartanburg is the rose center of the Piedmont Section, may be doubted; but it is a matter of fact that we have climate and soil which give ease of culture and opportunity of almost endless choice of types and varieties. Providence has blessed us with roses.

My Rose Favorites

By MRS. JAMES A. BANE, Roanoke, Va.

EDITOR'S NOTE.—Truly this good lady loves her roses, and she makes us see them in her garden. It is this intimacy with them that counts—that makes roses truly a part of one's life.

THE roses I like best to live with are not altogether those I would select for another's planting, nor are they constant bloomers of arresting colors such as would be chosen for special places as bedders or to please the taste of the majority; but they are roses endeared by associations and memories.

The first roses I can remember as a small child, in my grandmother's garden, were large, shrubby bushes under whose drooping canes I used to play, called "our Damask roses." They were very double, blush-white with pink petals close folded at the centers, deliciously scented—a perfect rose to be reared with. I do not know its name. Was it Œillet Flamand, perhaps?

In Virginia, many old gardens have the Cilician or Silician Rose (I have never seen it spelled.) I think it is identical with Old Blush, the original Bengal. To those unacquainted with it, I will say the small flowers are changing shades of pink of vague shape, in contrast to the cupped Hermosa, and it blooms from April till Thanksgiving. It is absolutely hardy and almost evergreen. Just as an apple tree makes any yard or garden more home-like, some old roses have the same effect. The Cilician Rose to me is a part of home.

The old Cabbage Rose, as everybody knows, is rose-colored and shaped somewhat like its name, with deeply ridged foliage belonging to the Centifolia family. In the same family is a much-loved smaller, shallow rose that we call Hundred-leaf, in color shading from blush-white to pink in each flower. (For shape and general appearance see 1927 Annual, facing page 12, upper left, lower left corners.) This is precious, but if you order Hundred-leaf you are almost certain to get Cabbage. My last order was for Pompon de Bourgogne, but it has not bloomed, so I am not sure it is identical.

The Hugonis rose and *Rosa xanthina*, even prettier, are so easy and so early that they have become justly popular, but

neither is as beautiful as the true old yellow brier, Harison's Yellow, early and hardy. This is one of my old loved ones, and is a part of the "ethereal mildness of the spring season." In my own small home plot I have three Harison's planted at the back among the flowering shrubs—Japanese quince, snowball, kerria, lilacs, forsythia. There are also Mme. Plantier, Frau Karl Druschki and the tall Moss roses. Everyone loves the Moss rose. It has languished awhile, partly because the fashion went out of wearing a bud in the lapel, but it is too beautiful to remain in obscurity. I have two kinds, the Princess Adelaide and the Old Pink Moss (1596).

Who would be without a General Jacqueminot? I love mine so well that it blooms for me four times instead of once or twice as scheduled. As my garden slants down to the back and toward the north, my Hybrid Perpetuals are to be found there in front of the shrubs where they may grow as tall as they will. Long before I heard that it was "delicate," I owned Giant of Battles—several, in fact. Now the only person I know who has one is Mrs. John Wood Stewart, who bought it in France.

A great water-lover is Baron de Bonstetten, so darkly handsome, heavily double, and very sweet; it has long been a favorite. Magna Charta and Georg Arends are there, and Paul Neyron, either as a tall tree rose or cut low as a bush, keeps itself a favorite by its fragrance and color in spite of its poor shape; but Mrs. John Laing is really the prettiest pink in this class.

The most ornamental plant is the hardy climber Zephirine Drouhin which, with the silver lace vine and white wistaria, is over the front porch. Dorothy Perkins almost covers a tall althea tree and droops to the ground. Paul's Scarlet Climber makes the arch farthest down the path. Emily Gray and Silver Moon hide the neighbor's garage. American Beauties are here and there. Bess Lovett and Glenn Dale are pillars. American Pillar, on the fence next door, fills the eye of the beholder. Mermaid and Moonlight lie under the windows. Two Zephirines over the entrance arch make it lovely in May, and the silver lace vines planted there follow in bloom, keeping up an airy-fairy effect until frost. Red Gruss an Teplitz and Virginia clematis frame the cellar entrance.

The tender climbers are beginning to arch over the path—

Climbing Maman Cochet, Climbing Mme. Caroline Testout, Maréchal Niel, Climbing Mme. Edouard Herriot. I think the most beautiful of the Hybrid Tea climbers we have here is the Climbing Duchess of Wellington, with foliage and flowers so graceful and fine. The pinkish, bronzy foliage of Zephirine Drouhin is practically evergreen, only it is not green but a blending of shades that perfectly accompanies the tender pink blossoms. The foliage of Maréchal Niel is the most aristocratic of any climbing rose—like smooth kid in texture; with its tender, reddish tips, it makes a background for this old Noisette of matchless fragrance. I have a leaning to the Noisettes and the Teas, and my soul rejoices when the June roses come back, so rich in perfumes and deep colors. The constant bloom and gorgeous new coloring have made the Hybrid Tea thé reigning flower of today, though often a sacrifice is made of fragrance.

Mrs. A. R. Barraclough and Dame Edith Helen are fair to see, and Souvenir de Georges Pernet and I understand each other, but Patience is the prettiest deep pink in many years.

The world has been different since the advent of Souvenir de Claudius Pernet, and since then greater efforts have been made in yellow, with the resulting Julien Potin. Can anything better be ahead? Mrs. Erskine Pembroke Thom is fine in the Maréchal Niel shade, and I am trying out Miss Rowena Thom and Ville de Paris. The Duchess of York, if laid in a saucer, will cover it. Lady Margaret Stewart is a fine dark yellow, but right now I am loving Julien Potin best. Rev. F. Page-Roberts has a remarkable personality; I have never seen two blooms alike.

Yes, I love red roses best, and they love me best, for roses know who love them. Etoile de Hollande is our great red rose.

The tree roses are Red Radiance, a lovely red—maybe not perfect, but a rose with perfect habits, blooming all the time, until nearly Christmas, and holding its red-brown foliage even later, Padre satisfies us with color. Irish Hope is great, and Lord Charlemont is magnificent.

Should I be wrecked on a lonely isle in the sea, what "favorite dozen" would I choose as my companions? Twelve? Cruel! When there are ten thousand varieties? But here goes!

Harison's Yellow, which should be an old inhabitant of the island, with thousands of blooms to cheer my spring. A little

later, General Jacqueminot and Etoile de Hollande, which I would rename Crimson Glory. Of the Teas, the dark scarlet and perfect Creole Beauty, or the aromatic Bon Silene, long loved, and I would like a Paul's Scarlet Climber to run around everywhere. In whites easily would be first Kaiserin Auguste Viktoria, a true aristocrat in rosedom. One would not willingly live without Souvenir de Claudius Pernet or Julien Potin. Patience, of course, and Silver Moon of ineffable beauty. And once having seen the luminosity of Los Angeles, we needs must believe there is something "Beyond the sunset's radiant glow."

What Are My Favorite Roses?

By THE EDITOR

IT WOULD almost be truthful to say that all roses are my favorites, and I would have to shudder into mental illness to confine my preferences to a dozen. Aside from the near-blue Veilchenblau and its imitations, I believe I have never seen a rose that has not given me pleasurable sensations.

But there are some particular pets I might mention. Because hardy climbers are my hobby, and I would therefore run away over reasonable space in talking about them, these remarks are confined wholly to the Hybrid Teas or the roses closely related.

Betty Uprichard hits me with several sensations of pleasure as to flower and plant. I get just as much of a kick out of Sweet Seventeen, an exquisite Australian rose, which isn't hardy, alas! Among the newer pinks and near-pinks I would have to mention Mrs. Henry Morse, which, as I see it, is so close to Willowmere* that I don't have to worry which I pick, for both are good. Mrs. A. R. Barraclough is a real delight in every way, and so is the much older Lady Pirrie; and another older rose that I wouldn't do without is Betty. (I have a charming little Betty granddaughter.)

Mme. Edouard Herriot strikes a spot in my color consciousness that no other rose touches. Lady Margaret Stewart goes deeper into both red and yellow, and I am trying to be sure I prefer it to Rev. F. Page-Roberts. Among the sheer yellow roses my allegiance is divided, because none of them is good enough to

*Some time the Editor and I will come to blows about this. These two roses are nothing alike!—G. A. S.

receive whole-hearted support. Eldorado has many points that give pleasure, and Souvenir de Mme. Boullet is often better. Yet I am more sure of finding yellow buds when I want them, or near-yellow buds, on Mrs. Dunlop Best.

Among the "off-color" roses, William F. Dreer, since I have grown it in the shade, takes a place no other rose holds.

The single Bracteata hybrid which is called Mermaid, just a little hard to carry over winter, is worth all the trouble one may put on it, and it surely is a favorite.

Returning to the pink group I must raise my voice for Birdie Blye, because it does keep blooming, even though sometimes it is magenta-blooming. We are mixed as to whether what we call Commandant L. Bartre ought not to be called Hofgärtner Kalb. It is no more beautiful in color than Birdie Blye, but it does have the most exquisite perfume.

Just so among roses that are not 100 per cent perfect but are indispensable, the chief is probably Lady Ursula, because it is always with us. And the whole Radiance family belongs in this consideration. I do not join the chorus of criticism of Radiance, for I love it for itself in addition to its general adaptability, vigor, and fragrance.

Each time Lí Burés blooms, I have a sensation of new pleasure, because no two blooms are ever alike. Talisman does run true to type, and it is a mighty fine type, so I must include that.

Here I have omitted in my survey the old standard Mme. Butterfly, altogether the best of the Ophelia group, and the best of all Polyantha roses in Gruss an Aachen. They belong!

We must have white roses, of course. Miss Willmott has much to commend it, and the new Nuntius Pacelli has both form and the fragrance lacking in the robust Frau Karl Druschki.

I get tired of the many red roses, each of which is surely better than all the others! If it had to be just one, it would be Etoile de Hollande, only that it would be necessary to flip a coin to discover whether I would not prefer Gruss an Teplitz.

Anyone ought to be satisfied that this is a catholic choice, and if he knew me very well he would also probably smilingly say that next season I would be likely to make a new choice. He would be right! All roses are good, and some are better than others.

Favorites from Pernetiana Paradise

By ADEN HYDE, Caldwell, Idaho

SELECTING a dozen roses is not easy. Color range, climatic adaptability, cutting qualities, and performance limit the selection to the extent that picking 25 or 50 is infinitely less difficult and certainly more likely to prove satisfactory. But I'd begin like this:

Mme. Butterfly and Mme. Edouard Herriot, two of the "Favored Dozen" which stand familiarity well, have a place in any garden, and can be depended upon season in and out to reward average care with a wealth of bloom. I doubt if there is a better garden cutting rose than Butterfly, spring, summer, and autumn. Herriot holds the performance record in Idaho. I counted, one day in late May, 192 buds and blooms on a single own-root Herriot plant, 124 another day in June at second blooming. These counts were made when the plant had already lost many blossoms of its crop in each instance, and the season's yield certainly cannot have been less than 700 blooms.

Those roses deserve their place. From that starting-point I'd move into the ranks of the ultra-moderns and unhesitatingly select these as worth a place in anybody's dozen: Mrs. A. R. Barraclough, Mrs. Erskine Pembroke Thom, Lord Charlemont, Etoile de Hollande, Rev. F. Page-Roberts, and Ville de Paris, and, with just a little less emphasis, I'd find a place for Lady Margaret Stewart, Mrs. Henry Bowles, Shot Silk, Betty Uprichard, Pink Pearl, and Angèle Pernet. If most of those don't eventually find their way into a favored dozen, it's because too many folks still grow Mme. Caroline Testout and Duchess of Wellington and what not, and cannot be aroused to a realization of what they are missing.

Mrs. A. R. Barraclough is one of the loveliest pink roses in all the world. I almost let that stand without modification and I'm not so sure it wouldn't be safely said. She mildewed slightly in June for me, yielded promptly to sulphur dust, and has been robustly healthy well into September.

Mrs. Erskine Pembroke Thom is a close approach to that beautiful theory, the "everblooming" rose. She is always gloriously yellow, stands up on rigid but not clubby stems, the bush is attractive, and the flowers are not coarse.

Ville de Paris has foliage that is richly distinctive, is possessed of wiry, unusually slender stems which nevertheless bear flowers well, and has the infrequent grace of yielding just one glorious crown blossom on each stem.

PLATE X. RICHARD E. WEST, a popular new Hybrid Tea
Colored illustration by courtesy of Bobbink & Atkins

Lord Charlemont, despite a certain lack of robustness, yields flowers of a richness not equaled by any red rose, and of a perfection that easily places it among the "aristocrats."

Etoile de Hollande is everything that a rattling good red rose should be. Together they offer serious competition to any red roses grown anywhere, any time. Modernity has no apology to make for them.

Rev. F. Page-Roberts lacks only vigor, but I find that plants today offer more likelihood of success than several seasons back. And the rose certainly compensates for its dwarfness with quantities of amazingly beautiful blooms.

Betty Uprichard, a prodigious bloomer, looks with me as if she were half sick, and lacks half a dozen petals of the fullness of bloom one likes best. Attractive in color, a stalwart, upright grower, this rose should be grown almost everywhere. She is a "rose for everybody." Write her faults in the sands.

Angèle Pernet, the acme of color perfection, is just a little shy in bloom quantity and all-round vitality to get a first rating. For the connoisseur, there is nothing to beat her. Give her plenty of room and sunshine.*

Mrs. Henry Bowles, a pink of heavy petalage and something of a return to the roses of the past, has everything except a passing inclination to go out of bloom occasionally and stay that way longer than she should.

Shot Silk is distinctly a garden rose. Its foliage resembles the glossy Oregon grape; the growth is compact, rather short, and extremely healthy; the bounding buds and blossoms come on comparatively short stems in a color which cloudy weather gives a remarkable richness. Shot Silk is distinctly a "crop" rose but the intervals between blossoming periods are surprisingly short, and the bloom yield is far above the average. A great garden rose in Idaho.

Pink Pearl opens its tight little buds into astonishingly large flowers of especial fragrance and charm, but Idaho's sunshine scalds them and they quickly lose their perfection. The plants are robust and cleanly enough.

Lady Margaret Stewart is a good enough rose for anybody but there are hardly enough of them. Perhaps, once established, the production will increase.

I almost passed by what I consider one of the real finds of the year, Wilhelm Kordes. It is beyond my comprehension why this rose, so long ago offered and recommended by the eminent German rosarian, should have been denied so long to those of us who like to plant budded, dormant roses. I tried it because Mr. Kordes applauded it. There are a number of plants of this rose in Caldwell this year, and I have watched it closely everywhere I have found it. In each instance the blossom yield has been far beyond expectations and the colors have really been something to rave about! One of the oddest things in connection with the rose is that of all the blooms I have seen, no two were exactly alike and some of them, coming on the same plant within the course of a few days, were so distinctive as to make one doubt the evidence of his own vision. If you want a real thrill in rose-growing, try a couple of these. I would plant them now in any dozen.

*At Breeze Hill Angele behaves well only in shade!—EDITOR.

Quite the finest individual flowers I have seen this season came on Feu Joseph Looymans. All the plants I observed were in their first year from planting, and the quantity of bloom has not been anything spectacular. Foliage unusually fine and the flowers good enough to draw ejaculations from any veteran.

Turning back the pages just a little, I would want other roses that most people do not include in their "dozen." I would want William F. Dreer and a Hadley or two, just because in the summer-time and all the time, Hadley yields wonderfully fine blooms for cutting; and I would want Los Angeles parked out in the glaring sunshine with plenty of room; and Golden Emblem in the same residence district; and George C. Waud for a nearly continuous crop of just good roses; and Souvenir de Claudius Pernet for his glorious golden yellow in July; and Mrs. Henry Morse and Columbia, maybe, if I had room for it and a little more patience with its inclination to be "bull-headed;" and Independence Day for a shower of garden color; and certainly Mrs. S. K. Rindge which yields the finest yellow blooms in September that any yellow rose ever gives me. And, if I had room for them, I would want Georg Arends and Mrs. John Laing, both of which bloom just as regularly as Hybrid Teas. There is no finer pink than the entrancing color of Georg Arends.

There are others I would insist upon having if the room I had available permitted me. I would have Imperial Potentate and Felicity—I still like the latter better, while the former, for all Mr. McFarland's criticism that it lacks distinctiveness, is a right good rose. I know I would make room somewhere for Mrs. William C. Egan, and perhaps for Winnie Davis, the latter much maligned but about as reliable for us of the Rocky Mountain plateaus as one can expect. I would have Willowmere, too, and Constance, just because she will bloom more than any yellow I know. And I would not make room for Duchess of Wellington on a bet; and I am quite positive that I never will want another Mrs. Charles Bell. Unless I had all of these I like, and room to try a few more of the new things that come along, I would not have Radiance, either. If that be treason, make the most of it!

If I had room for them—and I would make room somewhere —I would plant Coralie and Mary Wallace and Paul's Scarlet

Climber and Dr. W. Van Fleet and Silver Moon and Christine Wright, the latter because it always yields a lot of fine roses in July, and some more climbers, too. They do take room, though.

And if I had an incinerator, I would build a great fire and consign to it Mme. Caroline Testout and the whole Killarney tribe and Jonkheer J. L. Mock and Mrs. Charles Russell and a lot more that long ago outlived their usefulness or have, with us, some flagrant fault so marked that they deserve no better end.

Ideals and Favorites

By P. L. A. LINES, Seattle, Wash.

MANY of my favorite roses are comparatively old, having withstood the competition of novelties for a long time, and are still in the forefront of those desirable. As a matter of fact, most novelties, apart from their gorgeous color, are very poor examples of what a rose should be. How many of them can compare with the glorious shape and fragrance of many of the old Teas or, as a concrete example, with our old friend Avoca? What rose today can equal George Dickson at its best?

Both the growers and the buying public seem to have lost sight of the "ideal rose," and have, for the most part, neglected even to form an ideal for themselves. Strip Leslie Pidgeon of its color, and what have you? Or even the lovely Queen Alexandra Rose—take away its glorious carmine and its contrasting old-gold, and what have you? Merely a shapeless mess nine times out of ten. Yes, and take the great favorite, Radiance or Red Radiance—take away its blooming propensity, and what have you? There are a score of better reds, most of better shape and superior fragrance, but when grown well to large size, Red Radiance has about as much shape as a tulip.

Budded as standards, 2½ to 3 feet from the ground, the blooms of many of my favorite roses have an amazing superiority over those from low-budded bushes, and particularly as maidens. Of course, standards can be successfully grown only in the South and on the Pacific Coast as far north as British Columbia.

Now let me proceed to cite some of my loves:

Elegante. Always of good shape; bud long pointed on long stems; lasts well and color a very good yellow. Splendid foliage and strong growth. No disease.

Rev. F. Page-Roberts. Best with me on a standard. Very fine, shapely buds. The heavy veining on the guard petals of this really yellow rose is very attractive. Would like more bloom from it, but its size and general worth make it very desirable. No disease.

Mabel Morse. This rose delights me with its buttercup-yellow color and its free-blooming habit. It is always on the job, even though the bush is very small (and it generally is). If it only retained more shape in the half-open stage it would be a grand rose. It seems to do very much better on a standard than as a bush, and grown that way, even when not in bloom, is a beautiful thing on account of its glossy dark green and bronze foliage. No disease.

Souvenir de Claudius Pernet. This rose both delights and exasperates me. There is no yellow in any rose quite so delightful, and there is no rose that will give a larger percentage of poor blooms. By carefully choosing buds "to take" only on the weaker shoots, and discarding all strong-stem terminal buds, a fair percentage of well-shaped flowers may be had. It will mildew if not protected.

Feu Joseph Looymans. This rose is a little disappointing in color in the spring, often coming very pale, but makes up that deficiency in the summer, when it is very dark yellow or orange. It has a splendid shape in the bud which is carried on a long stem and it lasts well on the bush and when cut. A favorite with the beetles and caterpillars which seem to have a great liking for the petals.

Souvenir de H. A. Verschuren. Gives lots of bloom, and except for having edges of the petals slightly marred sometimes with brown markings, is of an excellent deep apricot-yellow. I love it on account of its beauty when open, as it holds well together, is very bright, and comes with such very strong stems and excellent foliage. It has also a very shapely bush. No disease. Its awkward name is its worst enemy in this country.

Mrs. Henry Winnett is one of my great favorites among the reds. It is a large, dark crimson, beautifully formed rose, with a high-pointed center, and grows with strong, heavy stems that are a delight to cut. The blooms last well, either cut or on the bush, keep their bright color, stand rain well, and have a delightful fragrance.

Climbing H. V. Machin is another favorite. I know of no other climbing Hybrid Tea that will give one such a succession of really large, crimson roses all through the spring and summer. Its color is intensely bright and its form is so good that it will compare favorably with any exhibition show rose. With me it starts blooming about the second week in June and continues until the end of August, with scattering bloom in September. However, I find it needs time to get established, and will not throw up shoots of 10 feet or more until three or four years after being planted.

Lord Charlemont, another red, is a good friend of mine, either on the bush or on a standard. When cut from maidens it is marvelous, and so much better than from cutbacks that it suggests to me that it is not really a strong grower and needs hard pruning (not one of my failings). It has a glorious fragrance and an indescribable beauty of coloring about the center.

Sir David Davis is a little uncertain in color. This fault may disappear when we have worked it and allowed it to regain its constitution. Its growth is upright and sturdy; foliage good enough; and it has a nice shape, nearly enough petals, and when its color is good is very attractive. Unfortunately, its fragrance is not very marked.

Holt Hewitt, unless I am very much mistaken, is going to be one of the best of the dark crimsons. Like all the new roses, it will have to be worked for some time before we will be able to judge its real merits. It has given me several wonderful blooms (very different from the first) that compare very favorably

with George Dickson at its best, with lovely, heavy veinings on the outside of petals and a rich, velvety, almost black, yet bright crimson on the upper side. The growth has not been strong, owing, I am inclined to think, to poor location in my garden. This has been remedied. It has delightful fragrance.

Hoosier Beauty, in the bush, does not give me such good blooms as does the climbing sport. I do not like the spindly way the bush grows, the leaf-buds are too far apart, and often the color of the blooms is bad. But *Climbing Hoosier Beauty* with canes 14 to 15 feet in length, throwing up stems 18 to 24 inches long by the score, surmounted with the rich, velvety crimson blooms, is a delight not to be forgotten. One bloom will perfume a room with a fragrance that is all its own. I could not be without Climbing Hoosier Beauty.

Mrs. Henry Morse is one of my favorite pinks, but so well known that its mention must suffice. It can be grown to a huge size without becoming coarse. Another old favorite is *Lady Ashtown*. This rose is neglected, yet it is a very refined rose, both in color and shape. It gives more bloom than most pinks.

Betty Uprichard, with its wealth of bloom, is indispensable in spite of its want of petals. What petals she has are disposed to such great advantage that, with the two tones of bright color and their delightful fragrance, she keeps me her captive. It is a splendid garden rose.

Mrs. Lovell Swisher. After two years' trial I have come to like this rose very well. The pale silvery pink blooms are a very good shape, well pointed, with high centers, and have a pretty habit of reflexing their petals. They have lots of substance, are of good size, and quite full. Although not exactly a self-pink in color, the rose-markings are so blended as to give it a very delicate appearance; it stands handling well. It is a very strong grower, like most of Mr. Howard's introductions. The foliage is dark green and very fine. No disease.

La Champagne is a very delicate pink but belies its delicacy by holding its own in every way. It is a strong grower and gives me very large and beautifully shaped blooms that last well. I find it advisable to grow the bushes fairly close together in order to crowd the growth upright and thus prevent its tendency to sprawl, as the buds are very heavy, and, grown this way, have good stems.

Lady Inchiquin. This much-abused rose is one of my strong favorites, and I cannot understand why it is not more popular. It is a beautiful pink, of a wonderful shape, and full enough to please anybody. And, thank goodness, it is a Hybrid Tea, though one can't help wondering if it didn't get its color from the Pernetianas.

Mrs. A. R. Barraclough attracted me from the first. One very rarely sees a poor bloom of this rose, and it can be grown to an immense size, even too large to be at its best. The yellow blooms, flushed pink, are of a very good shape, with high center and plenty of petals. Foliage good enough.

Una Wallace, usually called "cherry-colored"—which does not mean a thing, and is wrong if it did—is one of my great loves. It is like no other—so large, yet refined, so well equipped with petals that are so beautifully placed, reflex so knowingly, and of such an unusual pink—or is it a pink?—that a bush of ten or fifteen blooms with stems 12 to 18 inches long—they all try to come out together—is a sight not easily forgotten. It grows best with me on standards and has attracted the attention of the best rosarians of the Northwest.

Los Angeles, the best garden rose, is, of course, one of my loves, but very well known, and deserves higher praise than I could ever give it.

There are many others I love, but as I dislike no rose (unless it be Red Radiance) it is really very difficult to choose.

Of the blended shades, Lady Pirrie of the deckled edge and

deeply serrated and beautiful foliage, and the big, bold, changeable Mme. Edmond Rostand, with its strong stems and perfect foliage, and the wonderful Queen Alexandra Rose, which will, more often in the fall, give you perfectly shaped centers and a more brilliant colored "red" that is like no other, claim my strong affection. And then Sunstar, changeable as the weather, sometimes all yellow, sometimes almost pink all over, and sometimes—the way I like it best—deep golden yellow splashed with rose and deepest at the edges, throwing out its deliciously sweet perfume just as long as its (alas) short life permits. I daren't say anything about such old roses as Joseph Hill or Mme. Mélanie Soupert, *but they are real roses*, and I love them.

Mme. Butterfly and Ophelia I consider the best shaped roses of that type. Any rose *that is a rose* claims my affection. It is impossible for me to state my favorites.

As a Society, we should make some attempt to fix an "ideal" as regards type, shape, form, substance, and petalage in some concrete form and classify our roses, particularly the newer varieties, accordingly. I have purposely omitted some newer ones that promise to become favorites with me because I consider that unless one has grown the newer importations from self-budded stock for at least three years he cannot judge their true worth. An analysis of last year's "Proof of the Pudding" proves that.

My Favorite Roses and Why I Like Them

By G. F. MIDDLETON, President Seattle Rose Society, Seattle, Wash.

THE roses in my garden are grown not only for enjoyment and pleasure, but also for a definite purpose, either for (1) garden or house decoration, (2) the specimen bloom best suited for exhibition, or (3) for their attractive color or fragrance.

For Garden or House Decoration

The following roses are favorites because of their wealth of bloom, satisfactory growth, and little care necessary to grow them. Their attractiveness when displayed in a basket and when grown in a bed of one variety is a special merit.

Independence Day for freedom from pests, wonderful color and foliage.

Isobel. To me, the most attractive and best single rose.

Mrs. Herbert Stevens. Delicate color, lovely fragrance, and good form.

Padre. Dazzling color and keeping qualities.

Hawlmark Crimson. Its deep-veined markings fascinate me. Fragrance is not its only added virtue.

Lady Pirrie. One of my first loves, and I cannot do without her; a lady with all of Nature's beautiful complexion.

Bloomfield Exquisite. The first climber to give a wealth of bloom the *year of planting* and throughout the season. Blooms very fragrant and of good size.

Paul's Scarlet Climber for its blazing color when used as a hedge and the attention it attracts of persons passing by.

Climbing Lady Hillingdon. Another I cannot do without. I can forgive her bashfulness at times for all her other virtues.

Climbing Hoosier Beauty. I must have a red climber that has fragrance, good-shaped blooms, and splendid stems. Here it is.

The Specimen Bloom

These are the varieties that give me greatest pleasure. Many need special care in feeding or at pruning-time. Some have taken me several years to find out how to grow them to perfection and we appreciate things which are not easy to get.

Paul's Lemon Pillar. Three years of patience have rewarded me beyond words, not counting the first year of planting. It has brought me the Sweepstake honors that I have tried for years to win at our local rose shows. Sentiment do you call it? Not if you had seen this bush in all its glory, with hundreds of blooms, many of which were between 4 and 5 inches in length, and stems 44 inches long. This is actual measurement. Rain does not affect it. You can guess its delicious fragrance when I tell you one of its parents is Maréchal Niel.

Mabel Morse. To me the best pure yellow. I can grow it well and many cannot. I love its perfect blooms that do not fade in the sunlight. I can hear you say, "Oh, Golden Emblem cannot be beat." I object to split centers, and Mabel does not have this habit.

Mrs. Beatty. A rival of Mabel Morse. Grows well for everybody and has nicely shaped blooms, but the color is much lighter.

Doris Trayler. Here is a young lady that has perfect form, but needs a little rouge on her cheeks to add to her color.

Duchess of Wellington. This grand old lady has been admired for many years and still demands protection from the rain. I find she does not like manicuring (pruning) very much.

Mrs. Henry Morse. Another lady that does not disappoint you, and her manner of dress (form) is never bad. Take care that she does not take cold (mildew).

Mrs. A. R. Barraclough. A new arrival that has all the good qualities and one you will soon be glad to get acquainted with. I think she is too deep a pink.

Julia, Countess of Dartrey. This lady now in our midst has many robes (petals) which do not detract from her stately carriage (perfect form).

Mrs. Henry Bowles. Sterling qualities make it a pleasure to know her.

Climbing H. V. Machin. This gentleman is not happy when on the ground. What a show he makes of himself when on high!

Avoca. This and H. V. Machin are my two best "gentlemen friends" as red roses. They need very little help.

Lord Charlemont. One that truly "lords" it over most of the red roses. Aristocratic and very pleasing.

Victory. Capable of winning your admiration and producing the most perfect blooms of any red rose.

Arthur Cook. Has a very intoxicating fragrance. Its color is, perhaps, darker than any red rose. Stands rain well and never has given a bad-shaped bloom.

Dr. A. I. Petyt. I believe it *does* supersede George Dickson. The glorious sheen on its velvety petals adds much to its lovely form.

George Dickson. This gentleman has been with us many years. In fact, he believes old age should be respected (on a standard), and you must not overfeed him. When placed in a chair (ground) he is subject to all ills. It is well to retain his friendship if only to see how grand he can be once or twice a year.

British Queen. How well this does for me on a standard! No rose has a more refined shape. I love it.

Modesty. Another of those beautifully shaped roses that I love to grow. Well named for all its wonderful virtues.

Ellen Terry. The color is so different from white or cream varieties. Its fragrance is very pronounced. Perfect form and very lasting. Very vigorous.

Mrs. George Marriott has taken me several years to learn to know. What a joy it is when you have finally raised a splendid flower of perfect form. Its deep cream and pearl, when suffused with rose and vermilion, is not to be found in any other rose.

Muriel Wilson. A new Tea that has given me much pleasure. It is capable of producing very large blooms. I wish this climate of ours would enable me to grow more Teas.

Mrs. Courtney Page. An orange-cerise rose of good form. Had I judged it the first year of planting, I surely would have given it up, but on home-budded plants on standards, it has given me much pleasure.

Attractive Color or Fragrance

Here are the roses that I believe everyone is enjoying like myself. I find some are capable of giving specimen blooms and many have decorative value when displayed in a basket or vase.

When I think of the producers' descriptions of many of the newer varieties, I am convinced they must have kissed the "blarney stone." I have been tempted and purchased not a few. This is what keeps us interested in finding out what our fellow rosarians think of such and such a new variety.

Abol. A white rose with a strong fragrance. It has given a few blooms that have encouraged me to bud several. I always get better results then, and can truly judge their good or bad qualities.

Aspirant Marcel Rouyer. An apricot rose that reminds me of Lady Hillingdon. A bed is a sight to behold. Its keeping qualities are better than most roses that I know.

Betty Uprichard. Who could do without Betty Uprichard? A two-toned pink that I must have, and its free blooming habit and vigorous growth assure it a home in my garden always.

Duchess of Atholl. An entirely new color that has proved a worthy addition to my rose-garden. It is a very vigorous grower and free bloomer. I am sure it will be very attractive in a basket. I have budded many more.

Elegante. Well named. While I love Mrs. Beatty better, I cannot do without Elegante. At times I have had some lovely large blooms.

Feu Joseph Looymans. An apricot variety which grows well and has good foliage. Admired for its different color.

Golden Gleam. This will supersede Golden Emblem. It has better form and a deeper and richer color, but lacks size.

J. Otto Thilow. I have always liked Rose Marie, but here is one of a deeper pink. The buds are long and of perfect formation. I like its reflexed petals.

Lady Florence Stronge. How I wish you could see this rose in my garden! Yes, the coloring is "reddish prawn, shading to violet-rose, and washed with gold," and it appears in almost every bloom. What lovely, large, well-formed blooms it can give you. I should have included it among the "specimens."

Lady Inchiquin. I love Mrs. Courtney Page so much more than this, but it has an attractive color.

Marion Cran. A combination of colors that must be seen to be appreciated. For once the growers *underestimated* its size. It grows well and all praise given it by producers is well carried out.

Margaret McGredy. I agree it is one of McGredy's masterpieces and I have grown it for two years. It is a very vigorous grower and the sheen on its orange-scarlet petals is beyond description.

Martha Drew. "Now you see me, now you don't" surely applies to this rose. It has, perhaps, the best form of all the pink roses.

Mrs. W. E. Nickerson. Read the description given by the producer and you will know why I like it.

Norman Lambert. I wish I could describe the true beauty of this rose. I know, when I have plants enough, that a basket of it will be a revelation. I do not have to give it much attention. Lovely, thumb-thick canes over 2 feet long.

Patience. No patience needed to grow it. Is everything claimed by producer and am sure it will soon be among my "specimens."

Rose Dawn is surely correctly named, and reminds me of the sky when I am among my roses at 5 A.M. in the summer-time. Throw away your golf clubs and grow roses!

Shot Silk. Color and fragrance alone compel me to grow it.

Vesuvius. Because I want another single of a different color. What a beautiful bud just before it unfolds! Well named.

Westfield Star. Fragrance and lasting qualities alone would be enough to keep it in my garden, but it is much more satisfactory in growth and in form than many of the Ophelia sports.

I am sure we all agree that the following roses are favorites with us all; they will always be in my garden. Flame of Fire, Hadley, La Champagne, Mme. Mélanie Soupert, Mme. Raymond Poincaré, Rev. F. Page-Roberts, and perhaps many more.

The Editor again refers all rose-growers to page 34 of this Annual, for assurance that black-spot can be controlled.

Roses of the Future

By E. G. HILL, Richmond, Ind.

WHAT about the rose situation? What of the future? Have we reached the limit of excellence in the rose? The pessimist is troubled and thinks the goal has been reached; not so the writer. In forcing roses for winter production of bloom, great progress has been made, as witness the new varieties that have brought such a wealth of fine, good-sized flowers and have also added to the color of the parents from which they sprang—notably Premier Supreme, Briarcliff, Matchless, and Rose Hill. Besides, we now have presented to the rose-lovers many beautiful, high-colored varieties from the blood of Pernet, including Wilhelm Kordes, Talisman, Lady Margaret Stewart, Gaiety, Mevrouw G. A. van Rossem and others which have materially enriched the color scheme in our decorative, winter-flowering varieties.

The raiser of new varieties for winter-flowering should not be satisfied with these fine additions. It should be the ambition of the hybridist to increase the productiveness of these advances by breeding in greater vigor and strength, in order that the same splendid blooms may be produced in greater quantity, thus cheapening the cost of production and affording these beautiful blooms in greater supply.

That is my ideal; but, in addition, I am striving as never before to improve the color, form, texture and fragrance of the Queen of Flowers. The hybridizing of roses is a slow, tedious process, but results bring untold joy and spur one on to greater efforts.

The fine new fancy roses of the past two years have been of genuine value for decorative use as cut-flowers, but there is still much to do as regards varieties for garden embellishment. One of the greatest fields for doing really valuable work is certainly open to the raiser of new roses, to endeavor to give the rose-loving public varieties like Radiance in white, yellow, and crimson shades. The person who secures vigorous-growing roses that will succeed as Radiance, in the South particularly, and similar types, would be a real benefactor to the whole land.

Rating Rose Values

By CAPTAIN L. S. VAN DUZER, U. S. N., Horseheads, N. Y.

EDITOR'S NOTE.—There has been a great deal of talk about the difficulty of rating roses on a scale of merit as irises and peonies are rated, but very little, so far as the Editor knows, has been done about it. Captain Van Duzer's attempt is the first completely worked-out method we have seen with any comprehensive list of examples, and while it has certain disadvantages—the ponderous multiplications for instance—it gives results of unusual uniformity and good sense. In all methods, certain freakish things appear, as in this case the astounding position of Souvenir de Claudius Pernet. We leave to the members to solve, from Captain Van Duzer's tables, the mystery why that notoriously difficult rose should be at the top of his list. We suspect the solution lies in the Captain's good fortune to escape a visitation from black-spot.

IT IS very difficult for the amateur rose-grower, with only a small garden, to determine what roses, new or old, to add to the collection. In a large garden, many new roses may be given a tryout; in a small one, only a few can be tested. The small rose-grower cultivates roses for their beauty and the adornment of his house and grounds. He may have neither space nor leisure, and perhaps insufficient income, to experiment widely. His desire is to have a garden filled with the roses most suitable for his purposes. It is most important, then, that he should be able to place a relative valuation on the roses he grows; to determine which kinds ought to be increased in number, and which are of doubtful or negative value; and, if possible, to make intelligent selection of new varieties which he may wish to add.

The descriptions of roses in sales catalogues and elsewhere are incomplete aids. They overstress certain qualities and often do not mention others. For myself, I want a rose which is a fairly strong grower, giving good straight stems with an erect bud at the top; a good bloomer, a fair keeper, and beautiful in shape and color. Good size, good foliage, good petalage, hardiness, and resistance to disease are desirable; but some admirable roses are weak in one or more of these attributes. To ascertain whether a rose possesses the foregoing qualities to an acceptable degree is very difficult if one depends upon ordinary descriptions. So far, I have had to get two or three bushes and try them myself.

For my own purposes, during the past four or five years, I developed a system of evaluation which seems very useful and enlightening. The principal features of the system are:

1. Selection of those qualities of flower and bush which seem sufficiently important to warrant separate consideration.

2. Assuming reasonable perfection in the quality under consideration to be 100, I assign such percentage for each rose as may serve to express its relation to others with respect to this quality. In setting the lower limit of percentage for each quality I have taken into consideration the relative importance of the quality and the extreme permissible (from my point of view) inferiority below the standard.

3. For convenience I divide the qualities thus:

(*a*) *The bush:*

1. Hardiness; range, 50–100.
2. Foliage (beauty, fullness, etc.); range, 70–100.
3. Resistance to disease and insects; range, 70–100.
4. Growth; range, 60–100.

(*b*) *The stems:*

1. Length and stiffness; range, 50–100.
2. Erectness; range, 50–100.

(*c*) *The rose:*

1. Color and beauty; range, 50–100.
2. Size and shape; range, 70–100.
3. Petalage and development of bud and bloom; range, 80–100.
4. Odor; range, 90–100.
5. Number of roses per bush; range, 25–100.
6. Keeping qualities; range, 80–100.

4. The final merit is determined by multiplying together all the percentage factors.* To facilitate the computation I prepared a table of multipliers which greatly reduces the work.

In determining the percentage factor for a particular quality of any rose, the rose is compared as regards this quality with all other roses of the same type (Tea, Hybrid Tea, or Hybrid Perpetual); but while this comparison is being made, the consideration of all other qualities is suspended. When any one factor

*For instance, in the case of Souvenir de Claudius Pernet, on p. 113, 90 × 100 × 80 × 100 × 95 × 100 × 80 × 100 × 100 × 90 × 90 = 44.38. Of course, all except the first three figures are discarded so the rating stands 44.4

had been tentatively determined for the roses on my list, I found it desirable to go over the various values assigned to see if they were all relatively just. Some readjustment was necessary. The factors of new roses were determined in the same way. All factors require correction from time to time.

Tables of this sort prepared by different persons would not be in exact agreement. Since "beauty is in the eye of the beholder," the relative value placed on the beauty of the various roses would not be precisely the same for each person; nor would the estimates of other qualities be in strict accord, especially as climate, soil, fertilization, original quality of bushes, variations in the method of handling, and the like, all tend to give somewhat different results. But each person's table would be correct for him and suitable for his guidance; and if the factors be assigned with care and judgment after ample study, they will be of enormous assistance to his confrères.

I do not wish to convey the idea that I recommend growing only roses which stand high in such a list, even by the owners of small gardens. But all roses which stand high have fewest defects, and others have serious faults or are lacking in many respects. If certain outstanding qualities of some roses are important enough to induce one to put up with their defects, they become desirable even for a small garden. Thus, among my own roses, Rev. F. Page-Roberts, Etoile de France, Chateau de Clos Vougeot, White Killarney, La Champagne, Cuba, Los Angeles, H. V. Machin, Laurent Carle, Mme. Edouard Herriot, and Gruss an Teplitz have qualities that insure their continued presence in my garden, notwithstanding unpleasing defects.

I have been compelled, for the present, to omit the factor for odor. My own perception is not delicate enough to make me a competent judge, and the decisions of friends are likely to lack accord because the roses passed upon are not all of the same freshness or favorable development.

The system I am using is undoubtedly susceptible of very great improvement. If the large growers would prepare and publish in the Annual some such tables covering the newer roses, they would be of very great value to the great mass of the Society. In such tables a wide column of remarks would be a most desirable supplement. Sample tables follow:

TABLE I. HYBRID TEA CLASS. Method of Computing General Excellence

Name	Bush				Stem		Rose*					
	Hardiness 50–100	Foliage 70–100	Resistance to Disease 70–100	Growth 60–100	Length and Stiffness 50–100	Erectness 50–100	Color and Beauty 50–100	Size and Shape 70–100	Petals and Development 80–100	Number of Roses 25–100	Keeping Qualities 80–100	Final Value
Souvenir de Claudius Pernet	90	100	80	100	95	100	80	100	100	90	90	44.4
Red Radiance	95	90	100	100	95	90	80	95	100	70	90	35.0
Mme. Butterfly	95	90	90	95	80	95	85	90	90	90	90	34.2
Radiance	90	90	90	100	100	90	80	100	100	70	90	33.1
Padre	90	85	90	90	90	95	90	95	90	90	90	33.0
Ophelia	95	90	90	90	90	100	85	90	90	80	90	32.5
Willowmere	90	90	90	90	90	90	95	90	90	85	90	31.2
Lady Alice Stanley	95	90	95	90	90	100	75	90	90	75	100	30.0
Etoile de Hollande	90	90	90	90	90	90	95	95	100	70	90	28.6
Dame Edith Helen	90	90	80	90	90	90	90	90	90	90	90	27.9
Edel	90	90	90	90	95	95	80	90	90	80	90	27.6
Duchess of Wellington	95	90	95	90	85	85	90	90	80	95	80	26.0
Antoine Rivoire	90	90	90	90	90	100	80	90	90	60	90	25.8
Norman Lambert	90	90	85	90	90	85	90	90	90	85	80	24.8
Rev. F. Page-Roberts	90	90	90	80	80	90	100	90	90	80	90	24.5
Souvenir de H. A. Verschuren	90	100	90	90	90	90	80	90	90	70	90	24.1
Premier	90	90	90	90	90	90	85	90	90	70	90	23.2
Lady Ursula	90	90	90	90	100	100	60	90	90	80	90	23.1
Admiral Ward	90	90	90	90	90	90	85	90	90	70	90	23.0
Jonkheer J. L. Mook	90	90	80	90	100	100	70	100	90	60	100	22.7
Chateau de Clos Vougeot	90	90	90	90	90	90	80	80	90	80	90	22.0
Etoile de France	90	80	80	90	90	90	90	90	90	80	90	22.0
Mrs. W. C. Egan	90	90	90	90	90	90	70	90	90	80	90	21.7
Louise Averill	90	90	90	90	90	90	70	90	90	75	90	20.5
Killarney, White	90	90	90	90	90	100	70	90	90	65	90	19.6
Hoosier Beauty	90	90	90	80	90	85	80	90	90	80	90	19.4
La Champagne	90	90	90	80	90	90	80	90	90	70	90	19.3
Columbia	90	90	80	90	90	100	70	80	90	80	90	19.1
Cuba	90	90	90	90	100	90	80	90	70	90	80	18.8
Los Angeles	80	90	80	80	80	90	100	90	90	70	90	18.8
Betty	90	80	80	90	90	90	85	90	90	70	90	18.4
H. V. Machin	90	90	80	90	90	90	80	80	100	70	90	18.4
Mrs. Henry Morse	90	90	80	90	80	90	75	90	90	80	90	18.4
Mabel Morse	80	90	80	80	80	90	95	90	90	80	90	18.3
Laurent Carle	80	90	90	80	90	90	95	100	100	50	90	17.9

General MacArthur	90	80	90	80	90	90	80	80	80	90	90	17.7
Killarney Queen	90	90	90	90	90	90	70	90	80	70	90	16.9
Constance	70	100	90	70	80	90	90	90	90	80	90	16.7
Golden Ophelia	80	90	90	90	90	90	80	85	90	60	90	15.6
Gorgeous	80	80	80	80	80	90	90	90	90	80	90	15.4
Mme. Edouard Herriot	80	90	80	80	80	90	100	90	80	80	80	15.4
Lady Ashtown	80	90	90	80	80	90	80	90	90	70	90	15.2
Miss Lolita Armour	80	80	90	90	70	90	90	95	90	60	90	13.6
Harry Kirk	70	90	90	80	80	90	80	90	90	70	90	13.3
Maman Cochet	80	90	90	90	70	50	90	100	100	80	90	13.1
Gruss an Teplitz	95	90	90	90	50	80	80	90	90	90	80	12.9
Mrs. Franklin Dennison	70	90	80	80	90	90	75	90	90	70	90	12.5
Mrs. A. R. Waddell	85	90	80	90	80	80	85	90	80	70	80	12.1
Hadley	90	90	90	80	90	90	80	90	90	50	90	12.0
Mrs. Aaron Ward	90	80	90	70	70	90	80	80	90	80	90	11.8
Mme. Caroline Testout	90	90	90	80	80	90	80	80	80	70	90	11.7
Mme. Léon Pain	80	90	80	80	80	90	80	90	90	60	90	11.5
Lyon	80	90	80	80	90	90	60	90	90	70	90	11.4
Roselandia	70	80	80	80	90	90	85	85	90	60	90	10.2
Kaiserin Auguste Viktoria	80	90	80	80	80	90	70	90	90	60	90	10.1
Killarney, Pink	90	90	90	80	80	90	60	90	80	70	80	10.1
Pharisäer	70	80	80	80	70	90	70	80	90	60	90	9.8
Killarney Brilliant	90	80	80	80	90	90	60	80	90	60	90	8.6
Lady Hillingdon	70	80	80	80	70	70	70	80	90	60	90	5.8

*The factor for odor is omitted.

TABLE II. HYBRID PERPETUAL CLASS

Name	Bush				Stem		Rose					
	Hardiness 50–100	Foliage 70–100	Resistance to Disease 70–100	Growth 60–100	Length and Stiffness 50–100	Erectness 50–100	Color and Beauty 50–100	Size and Shape 70–100	Petals andDevelopment 80–100	Number of Roses 25–100	Keeping Qualities 80–100	Final Value
Georg Arends	95	90	90	95	95	90	95	100	100	100	100	59.3
Frau Karl Druschki	100	90	90	95	100	95	100	100	100	70	100	51.2
Gloire de Chédane-Guinoisseau	100	90	90	90	100	100	100	95	100	70	100	48.6
Heinrich Münch	100	90	95	95	90	90	90	90	100	90	90	43.2
J. B. Clark	100	85	90	100	90	80	90	100	100	90	95	42.4
Paul Neyron	100	85	90	90	90	90	80	90	100	90	100	36.2
Captain Hayward	100	85	95	90	90	95	85	90	90	90	90	34.7
Magna Charta	95	85	85	85	90	100	100	95	100	70	90	32.4
Juliet	100	80	75	85	80	80	90	90	100	70	90	16.7
Marshall P. Wilder	100	85	90	85	80	90	80	80	90	60	80	13.0

Shipping Cut Roses

By S. S. PENNOCK, Treasurer American Rose Society, Philadelphia, Pa.

THE general public does not understand that in order to ship roses or any flowers so that they will keep well, they must be prepared for the journey by being put in water and thoroughly hardened up immediately after being cut.

The best time to cut roses, whether garden or greenhouse grown, is early in the morning, before the sun gets to them, and while they are still filled with moisture absorbed during the night. They should be placed immediately in deep water and left there ten to twelve hours in order that they may take into their substance as much water as possible. They should be kept in a cool place at an even temperature and out of the way of drafts, because changes in temperature and the drying action of drafts are extremely hard on them. A rose handled in this way will keep well for a considerable time and will not bruise easily, but a rose that is cut and sent to market or shipped any distance without being first properly hardened in water, is never quite the same. No matter what is done later, it never properly recovers and gives satisfaction.

When roses are to be shipped a long distance, they should be packed in wooden boxes, well lined with wet newspapers, covered with waxed paper. All roses generate a certain amount of heat when thus closely confined, so that the whole shipment must be thoroughly chilled and kept so until it reaches its destination. The flowers should be laid in layers, not too closely, and some cracked ice scattered on the stems. If they are going very far, a cake of ice should be cleated in on the stems in such a manner that neither the ice nor flowers will shift. It is important to cleat or tie the flowers very firmly, even if they are going just a short distance, because both expressmen and mail-carriers handle all shipments more or less roughly, and unless the flowers are securely fastened, they will shift and jam against the end of the box and ruin their usefulness. If there are too many flowers packed too tightly in the box, they are bound to heat, even if well iced, but a heavy outer wrapping of paper will help keep them cool.

Rugosa Roses and Their Hybrids

By CHESTER D. WEDRICK, Nanticoke, Ont.

EDITOR'S NOTE.—Combining tremendously vigorous growth, disease-resistance, extreme hardiness, with the tendency to bloom all season, there seems to be a great likelihood that the Rugosa type will eventually largely dominate the rose-growing of the cold regions of the earth. Mr. Wedrick's experience with many varieties recounted here, and his enthusiasm for them, should encourage adventure among this group of roses by others who have difficult climates to deal with.

Further, his suggestion that the Rugosas are well used in the shrubbery, for backgrounds, for hedges, should be followed. Much beauty can be had with little cost. Mr. Wedrick has not mentioned the fact that when these vigorous roses become ungainly, they can be completely renewed by shearing them off at the ground.

THE type *Rosa rugosa*, of Asia, introduced to English garden-lovers by Thunberg in 1784, is the only fairly dependable, recurrent-blooming species of ironclad hardiness. Its vigorous, shrubby growth, its rich, dark, wrinkled foliage, its adaptability to almost any situation, not extremely wet, and its large, fragrant, single flowers of red, pink, or white, borne more or less continuously from early summer until frost, combine to make very attractive plants. The flowers are followed by very large, conspicuous seed-hips or rose "apples," which, if allowed to set too freely, have a tendency to curtail recurrent blooming, particularly when in poor soil and during periods of drought. Another favorable Rugosa trait is the foliage, which is quite ornamental in the fall, developing beautiful tints of red and orange, and which is also practically immune to disease.

Both the single red and white have double forms that are splendid shrubs. Among the many hybrids there are variations in leaf, habit of growth, and diversity in bloom to a greater extent than in any other class of bush roses.

It is my opinion, their ability to thrive under almost any conditions has been emphasized too much. It is true that they will live where almost any other self-respecting rose would perish, and yet no roses respond more readily and generously to a little special care.

Hybridizers, realizing the desirable traits of the Rugosas, have crossed the original forms with other types of roses, and many valuable kinds have been produced. Some are as hardy

and disease-free as the original species; others are more tender and more or less susceptible to disease. Some of them are splendid hedge plants, and nearly all make ideal specimen shrubs. They are very useful for background plantings, to enclose rose-gardens, and in countless other locations. Their tough, thorny growth makes them splendid for exposed positions.

While one sees a certain number of Rugosas and their hybrids in public parks and in some rose-gardens, there are usually but few kinds. Without disparaging other shrubs, one might suggest that the substitution of Rugosas and their hybrids in many cases would add a charm to an all too frequently monotonous display. The elimination of several million spireas and *Hydrangea paniculata grandiflora* in America, and their replacement by Rugosas, would be a decided improvement. Mixed among other shrubs, they add a variety to the assortment particularly to be desired.

In any event, it is the one species that is making it possible to grow free-blooming roses where climatic conditions prevent the growth of tender roses by the average person.

Rose experts may have a low opinion of the quality of blooms of some of the hardiest hybrid Rugosas, but on the cold, wind-swept prairies, their cheery, fragrant flowers mean more to lonely hearts, hungry for beautiful things, than the most exquisite productions to people in more favored climes. This is especially true of those who have cherished memories of the old home "back yonder," where dear ones tended beautiful flowers with loving hands, and the rose was their special care.

Of more than sixty kinds of Rugosas tested, the following varieties are, in my opinion, the most desirable.

Agnes Emily Carman (Rugosa × Harison's Yellow) makes a vigorous bush 5 feet or more in height, with fine foliage, quite large and fairly rugose. With me it bears a splendid crop of fairly double flowers of the richest Jacqueminot crimson shade in June, and scatteringly thereafter. In a great many districts this is reported to bloom only once. It is very hardy.

Mme. Georges Bruant (Rugosa × Sombreuil, T.). A moderate grower, with very healthy, rugose foliage and bunches of loosely formed, fragrant flowers of the purest waxy white, very continuously produced. The flowers are delicate in texture, because of the Tea blood, and yet the plant is quite hardy.

Blanc Double de Coubert. A most desirable hybrid. It is very strong-growing, with typical Rugosa foliage, and produces large, snowy white, fairly double flowers all season; the perfume is exceptionally fine. The half-blown buds are very pretty. Very hardy; sets many large scarlet fruits.

Sir Thomas Lipton (Rugosa alba × Clotilde Soupert). A production of the late Dr. Van Fleet, it is, to my mind, the finest of all the whites when well grown. It requires rich soil and good care to display its full possibilities. Planted where it has ample room to develop, it makes a magnificent, vase-shaped shrub of wonderful vigor. I have an old specimen, 9 feet high and of corresponding spread, that is a dream of beauty when loaded with its myriads of large, snow-white, double, slightly fragrant flowers in June, and thereafter more or less till heavy frost. Some years it is as beautiful in the fall as in June. Here it has never winter-killed, no matter how heavily I have fertilized it, nor has it shown any trace of black-spot or mildew on its shiny, rugose foliage. It seems to be absolutely sterile, as I have never seen or heard of it ripening seed-hips. This variety is slightly less hardy than Blanc Double de Coubert. In many localities of the Middle West it frequently blooms only once in a season. It makes a splendid hedge around a rose-garden.

Souv. de Philemon Cochet. A fine, very double, white hybrid, with the typical foliage and habit of the Rugosa. It blooms very freely and its fragrant flowers are followed by good seed-hips. While very hardy, it seems to be little known as yet.

New Century. Another Van Fleet production, of the same parentage as Sir Thomas Lipton, but with large, fully double, fragrant flowers of clear flesh-pink, with a light red center and creamy edges. It is very free-blooming, with foliage like Sir Thomas Lipton; is scarcely as vigorous, but hardy.

Belle Poitevine. Though produced over thirty years ago, this rose still holds its place as one of the finest hybrids. With its ideal habit of growth, rugose foliage, and very large, loosely formed flowers of rose to magenta-pink, borne in profusion all season, it is a wonderful decorative rose. It sets seed-hips and is entirely hardy.

Sarah Van Fleet. The last of the Van Fleet productions. It is a very strong grower, hardy, with medium Rugosa foliage, immune to disease, and produces semi-double, fragrant flowers of a wild-rose pink very continuously. It fades in heat, but is very fine in the fall.

Hansa. Freely produces double reddish violet flowers on a very vigorous plant of exceptional hardiness; sets fruits. Le Melusine is of very similar color, with a wonderful perfume, and is free-blooming.

Rose a Parfum de l'Hay has Damask blood, is hardy and a healthy grower, with rugose foliage, producing double, dark carmine-crimson blooms continuously if seed-hips are removed; extremely fragrant, but blues in heat.

Roseraie de l'Hay, a sport of *R. rugosa rosea*, is similar to its parent, producing dark red, double, fragrant flowers freely, and is exceptionally hardy.

Magnifica and Souv. de Pierre Leperdrieux are two other double reds with typical Rugosa foliage. They are very free-blooming.

Conrad Ferdinand Meyer represents another type of Rugosa hybrids, and produces flowers of the very finest quality. It is a very strong, thorny grower—a legacy from its Dijon blood. The foliage shows no trace of its Rugosa ancestry, and is rather susceptible to black-spot, particularly near the northern limits of its growth. It makes a magnificent pillar rose, and after its June bloom produces its large, double, silvery pink, fragrant flowers at intervals. This rose is less hardy than most of the hybrids, not being dependably hardy north of the peach-belt in the East. If there is a wet fall and it grows late, it frequently winter-kills badly after several seasons of successful culture. The main thing is to restrict feeding it heavily after midsummer, so the wood has a chance to ripen properly. In the drier districts of the mid-West it appears to withstand more cold successfully.

Nova Zembla is a duplicate of Conrad Ferdinand Meyer, but scarcely as vigorous, with flowers of white, tinted blush. It is considerably hardier and with me a freer bloomer.

F. J. Grootendorst is the first of a new type of Rugosa hybrid cross (Rugosa × Baby Rambler). It is a splendid acquisition and of ironclad hardiness, or it would never have survived the ordeal of being christened with such a name. Of vigorous, spreading habit, its thorny branches grow to a height of 6 feet or more, with wonderful, large, disease-free foliage. It would be very ornamental even if it never bloomed, but covered as it is all season with its large clusters of small, bright red, double flowers with petals notched like carnations, it is a gem. The flowers are very durable, but scentless and sterile. As an everblooming shrub or hedge of assured hardiness, it is equaled by no other plant I know, unless it is its pink form, a later introduction, which has all its virtues, but with flowers of a beautiful light shell-pink. I am sure it will be a matter of only a few years until this type will be largely added to, and many new shades of color introduced. At time of writing this (mid-November) they are both still blooming.

Schneezwerg. Also the first variety of a new combination (Rugosa × Bracteata). It is a rather dwarf, spiny plant, with splendid foliage, and combines the hardiness of Rugosa with the free-blooming habit of Bracteata. It seems dependably hardy here, producing a continuous display of clusters of semi-double, snow-white flowers, with golden stamens, all season. These are followed by quantities of small red fruits that are very attractive in the autumn.

Agnes, produced by the late William Saunders at the Central Experimental Farm, Ottawa, Ontario, Canada, brings the long-desired yellow tints to this family. It is a real acquisition. True, it blooms only once, but against a background of a vigorous plant clothed with very distinctive, grayish, much-pitted and wrinkled, disease-free foliage, its fine buds of coppery yellow, opening to well-formed, sweet-scented flowers of pale amber, are wonderfully attractive. It is a cross of Rugosa × Persian Yellow, and appears to be sterile. Of dependable hardiness, it should be pruned very little.

The following bush Rugosas are well worth trying:

Georges Cain. Very dark, fairly double flowers, freely produced on a bush with very large, rugose foliage. Extremely hardy.

Hildenbranseck. Makes a very vigorous shrub 6 feet or more in height, clothed with waxy, rather small leaves having little trace of the Rugosa blood, but very healthy. It bears its semi-double, light carmine flowers in clusters, very continuously. Appears to be quite hardy, and though generally reported sterile, mine seeds sparingly.

Dr. E. M. Mills. A hybrid Hugonis that makes a very pretty, early-blooming shrub growing to a height of 4 feet, with small, deep green foliage. Though classed as a Rugosa hybrid it looks to me more like a Hugonis and Spinosissima cross. Its semi-double flowers, about 2 inches or more across, of a primrose shade, suffused with pink, are very decorative. Very hardy.

To those who are partial to single roses, Carmen, bearing single, light crimson flowers very continuously, will have a strong appeal. It is very hardy.

Comte d'Epremesnil, the first named Rugosa of a red shade, was produced by Nabonnand in 1882.

Amélie Gravereaux is especially desirable in extremely cold climates, making a strong shrub with fine foliage, and producing medium-sized, purplish red flowers; exceptionally fragrant. It is recurrent blooming.

I have tested the following for too short a time to form an adequate opinion as to their real value, but, so far, they please me very much.

BERGERS ERFOLG, a vigorous grower, bears a profusion of clusters of very bright red, single flowers 3 inches or more across.

STERN VON PRAG, a strong grower, bears large, fragrant, very double flowers of a velvety dark red; looks like a find and blooms at intervals.

RUSKIN (to be offered for sale in 1930) combines the bloom beauty of the Hybrid Perpetuals with magnificent, large, healthy Rugosa foliage. Its pure crimson color, rich fragrance, and fine form marks a real advance in the Rugosas, as so many of the reds have a tendency to blue. It bloomed freely early in the summer and sparingly thereafter, but this was the first year for it with me.

This article would not be complete without mentioning the climbing or trailing Rugosa, MAX GRAF. This splendid, ironclad sort bears large, single, pink flowers on a typical Rugosa plant. As a ground-cover it is superior to *Rosa wichuraiana*, and will survive where that variety always winter-kills, coming through alive to the tips. Here is a rose that should be planted by the thousands. Usually it is once-blooming, though it blooms a little in September sometimes.

SCHNEELICHT is a climbing Rugosa with large, very white flowers, borne on a strong-growing plant that is best used as a fence-cover, as its tremendous, thorny growth is almost impenetrable.

Enough has been said to show there has been much done in the Rugosa class, but the future holds promise of still greater advances. The work of Prof. N. E. Hansen,* who has already produced some choice sorts, with promise of many others in the future, at the South Dakota Experiment Station, is probably the most outstanding being done at the present time.†

It is only a dream yet, but I am convinced the time will come when the rose will be grown as universally in the cold districts of the north as it is in more favored districts of the continent. Then, and not until then, will the membership of the American Rose Society greatly increase in these districts and the slogan, "A rose for every home; a bush for every garden", become an accomplished fact. What greater honor could one wish for than to leave behind a memory, more enduring than marble, in the gardens of the land, living, blooming memorials, *aere perennius*, made possible by tireless efforts with the "Queen of Flowers," to make this dream come true?

*See page 226, American Rose Annual, 1927.—EDITOR.

†The Editor knows of several interesting Rugosa seedlings still under test: one with flowers like the Hybrid Tea, Miss Lolita Armour, one with immense greenish yellow flowers, and another cluster-flowered climber with extremely handsome foliage, even for this class. Several years' testing are still required to prove their worth.

An Experience with Little Own-Root Roses

By HORACE W. TRUESDELL, Bluemont, Va.

EDITOR'S NOTE.—The Annual prints the facts concerning roses, and is glad to have these words of success concerning own-root plants. The peculiar care given by Mr. Truesdell almost insured success, and location certainly had some relation to it. From Washington south, own-root plants usually do well.

ALMOST every year, for my own interest and amusement, I get one or two special collections of little own-root roses which are advertised in garden and farm journals. I do not buy these in place of budded roses, but in addition to them.

To the person who wants as many and as large roses as possible in the shortest time and with the least risk of failure, the large, budded plants may be the ones to buy. But there are still gardeners who take a joy in the growing of plants, and to whom a rose bush possesses individual character. As budding has a tendency to reduce varietal and individual variations, the own-rooted rose should appeal to such.*

But the special collections have an added interest in that they may contain new and untried varieties, some unadapted to the climate, while some may be mislabeled so that the names will not be known for certain until the plants bloom, if at all. I do not defend the practice of mislabeling, however, and suggest as a substitute that the companies sell plants with key numbers and furnish the keys in the fall.

Last spring I bought two special collections of six everblooming roses each, the two costing a dollar. The plants were the usual first-size, own-roots, 3 to 4 inches tall and in full leaf.

The varieties in the first lot, which arrived March 15, were labeled Charmer, Golden Ophelia, Royal Red, Mrs. Charles Bell, Pink Radiance, and Red Radiance. These were rather wet on arrival, and the foliage badly infested with black-spot and mildew. They were planted in pots made of peat moss, which were buried in earth in a box indoors. (These pots are better than earthen pots, but have no advantage over planting directly in soil in a box.) Royal Red died because of an air-pocket next

*Is Mr. Truesdell sure of this? And will a "key" unlock mislabeling?—EDITOR.

the roots; air-pockets are more likely if plants are potted. Another year I shall puddle the roots as an added precaution.

The varieties of the second lot, which came about April 15, were Sensation, White Ophelia, Killarney, Sunburst, Radiance, and Mme. Butterfly. The plants arrived in a very dry condition, with the leaves withered and brittle to the touch, but they were perfectly clean and free from disease. The second lot soon overtook the first lot, and any advantage in earlier planting was counterbalanced by the better condition of the second lot.

About May 20, all of the plants were set in the garden row with other roses. By this time they had replaced all of the old leaves with healthy new ones, they were in vigorous growth though not appreciably larger than when they arrived, and they had established their roots and could be moved with soil.

There was no special preparation of the land where the roses were set other than that ordinarily given for corn or beans. The plants were manured and nitrated on the surface and were given frequent hand and horse cultivations. There was no watering after the time of transplanting.

The foliage was protected by dusting every two weeks with sulphur and arsenate of lead. At one time this proved insufficient, and some plants were defoliated by black-spot.

Disbudding was practiced until July, and again in November.

The following table gives the bloom and growth record:

Variety	Blooms						Growth		
	July	Aug.	Sept.	Oct.	Nov.	Total	Diam. at Ground Inches	Height Inches	Black-Spot
*Red Radiance	2	3	4	5	2	16	1/4	24	resist.
*Radiance	2	4	8	6	1	21	1/2	28	resist.
Sunburst	1	2	1	4	1	9	3/8	30	resist.
Mme. Butterfly	1	2	2	2	0	7	1/4	20	medium
Mrs. Charles Bell	1	3	2	3	0	9	1/2	18	medium
Columbia	1	0	2	1	0	4	1/8	20	susc.
*Killarney	1	3	1	3	0	8	1/4	15	susc.
White Ophelia	1	3	2	7	0	13	1/8	16	medium
Golden Ophelia	0	5	5	4	2	16	1/2	20	immune
Sensation	0	7	2	6	1	16	3/8	29	medium
Charmer	0	0	0	0	0	0	1/8	10	susc.
Total	10	32	29	41	7	119			
Average						10.8	1/4	21	

*Not true to name.

From the table it will be seen that 119 roses in all were cut from these bushes, or 10.8 roses to the bush, including a weak

bush which never bloomed. At the same time, strong bushes, averaging $\frac{7}{16}$ inch in diameter and 21 inches in height, were produced. Four bushes had 16 or more blooms each, and these happened to be extremely beautiful. One plant had 21 blooms.

Red Radiance and Radiance proved not true to name, but were two distinct beautiful pink roses. Golden Ophelia, with its long yellow buds, and Sensation with its dark velvety red color and firm petals, were the two outstanding varieties.

Two years ago, Dr. McFarland and Mr. Stevens conducted an experiment with own-rooted, everblooming roses,* and from their results concluded that budded roses would have been cheaper. I need only say that for one dollar I got 119 blooms and have ten bushes which will live over winter. The comparisons I leave to the reader.

In considering results, it will be said that the South has considerable advantage in climate over the North. I disclaim any such advantage for my roses. The roses in question were grown in northern Virginia, at 1,600 feet elevation, where the weather is considerably colder than in New York City.

The usual procedure which leads to failure with the little, own-rooted plants is to set them right outdoors, just as they are received from the nursery. It is too much for the tender, often sickly, greenhouse plants, without their roots established in soil, to stand the drying winds, the frosts, the cold rains, and the cold soil of April. They will die or be checked so that they will be too weak and shallow-rooted to grow in the heat and drought of summer. By September they may start to grow, but too late to become strong enough to endure the winter. If planted later, but just as received from the greenhouse, they will likewise not establish themselves in time to stand the summer drought, and the result will be the same.

What I consider the key to success with these little rose plants is to establish them indoors or under glass early in the spring so that when the soil has warmed up outside they can be set out with earth on their roots, with new foliage, in a high state of vitality, and in active growth. When this plan is followed, they will never stop growing until freezing weather.

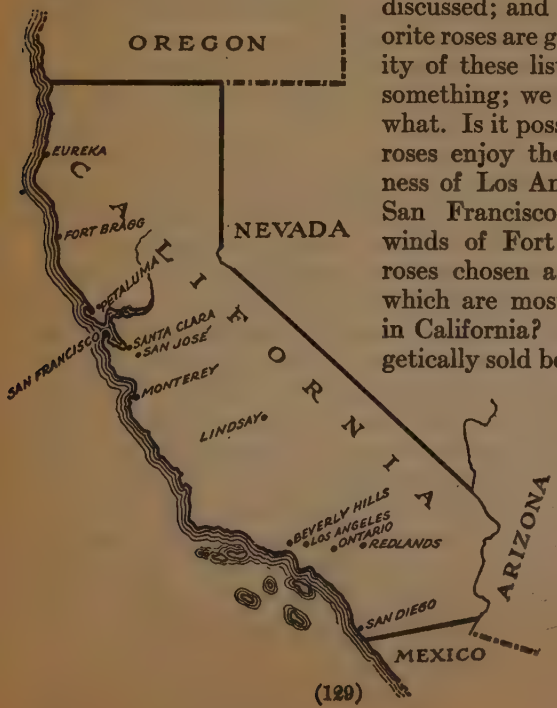
*See the result of this test reported in the 1927 Annual, page 35.

California Roses

A SYMPOSIUM

IN THE Annual of 1926, the rose-growing possibilities of the state of Florida were examined and discussed by rosarians who had actually grown roses under Florida conditions. In 1927, New England, New York, and adjacent Ontario were similarly discussed as "The Northeast Corner." In 1928, the vast central prairie section of the continent, extending from Iowa and Nebraska northward, was investigated under the title, "The Blizzard Country." This year, California is subjected to the same intensive treatment.

The widely varying conditions of soil and climate in the Golden State are clearly set forth in the sixteen articles which make up this symposium; interesting methods of culture are discussed; and many lists of favorite roses are given. The similarity of these lists is indicative of something; we are not just sure what. Is it possible that the same roses enjoy the salubrious mildness of Los Angeles, the fogs of San Francisco, and the ocean winds of Fort Bragg? Are the roses chosen as best roses those which are most persistently sold in California? Are they so energetically sold because they are the best roses?



The outline map on this page indicates the locations where the following articles were written, providing a basis for judgment by other growers.

Physical Geography of California

By DR. EMMET RIXFORD, San Francisco

CALIFORNIA extends from 32½° to 42° north latitude; nearly 10°, or 655 miles; and, roughly, between the latitudes of Savannah and Boston. Thus the state lies somewhat more southerly* as compared to the more populous eastern coast than is perhaps generally thought.

San Francisco, in latitude 37° 48′, is well south of Washington, D. C. (latitude 39°); in fact, is nearly as far south as Richmond, Va. (37° 32′)—within 5 miles, while Los Angeles is south of Wilmington, N. C., and San Diego is in almost exactly the latitude of Charleston, S. C., but the climate in every part of the state is milder than that of the corresponding latitude on the Atlantic Coast, and is notably free from the extremes of cold in winter and humidity in summer, so characteristic of eastern climates. The annual rainfall varies from practically zero in Death Valley to 100 or even 120 inches on the northern coast.

Extending somewhat northwesterly and southeasterly, its midline is some 780 miles long, while the almost unbroken coast-line is about 1,000 miles.

A striking peculiarity is that its entire eastern flank is mountainous—the mass of the Sierras rising to an almost uniform elevation of 6,000 to 8,000 feet, with peaks soaring to 12,000 and a few to over 14,000 feet—while its western part is guarded by the so-called Coast Range of about 2,000 feet average elevation, with a few peaks rising to 3,500 and 4,000 feet.

Between these two mountain ranges lies the great central valley of California, watered by the Sacramento and the San Joaquin. This valley is hot in summer, the thermometer in the daytime sometimes reaching 110° or 115°, but the humidity is low, so that men and animals are not prostrated in the field.

The upper reaches of the Sierras, with their heavy fall of snow, present almost arctic conditions, with temperature dropping to 20° below zero—even 40° below has been known—and the fauna and flora tend to Alaskan types. The climate of the western slopes is temperate, in fact, warmer in winter and cooler in summer than the floor of the valley. Thus the very remark-

*More *northerly*, we should say.—EDITOR.

able phenomenon is presented of the isothermic lines extending along the foot-hills lengthwise of the state, northwest and southeast, for 500 miles or more, so that oranges and lemons are produced in quantity over 100 miles north of San Francisco and nearly 400 miles north of Los Angeles.

Conditions are somewhat different south of Tehachapi in that the mountain ranges are broken and to a greater extent run east and west. Some of these ranges are high enough to carry perpetual snow, so that a series of climates is found, ranging from semi-tropical to arctic in temperature, but with a relatively low humidity.

The long, dry summer season, with practically no rain from April to October, makes many horticultural processes possible which would otherwise be difficult, because of the control of the water-supply by artificial irrigation.

The climate is so mild over most of the state that many roses have almost no dormant season, but continue growing and blooming the entire year. Practical gardeners secure much finer winter blooms if the plants are permitted to rest in summer. This is brought about by withholding water during the month of August, when the leaves drop and the plants become dormant, almost as in winter elsewhere, to start again when watered. I enjoyed a wonderful bouquet of Rêve d'Or blooms picked from a hillside garden near San Francisco on Christmas Day.*

California has a few native roses, all apparently related to or modifications of *Rosa acicularis*. They are *R. californica*, *R. gymnocarpa*, *R. nutkana*, and *R. pisocarpa*. The first is distributed over the entire area, but the others are limited to the northern third of the state.

Such roses as *Rosa brunoni* (the Himalayan Musk rose), *R. lævigata* (Cherokee), *R. banksia*, and the glorious Fortune's Yellow (Beauty of Glazenwood) are found in many parts of the state, climbing to 40 feet on trees and buildings, while even *R. gigantea*, from Burma, will grow in sheltered spots.

In the southern part of the state the Teas and Hybrid Teas reach perfection, while the Hybrid Perpetuals generally do better in the northern counties, where, with heavy rainfall, the climate approximates that of Portland, Ore.

*See picture facing page 25.—Editor.

The California Rose Climate

By CAPT. GEORGE C. THOMAS, Jr., Beverly Hills

TO ANALYZE the California climate it is most necessary to understand that different sections of the state vary greatly in means and extremes of temperature, in amount of precipitation, in air-moisture or lack of it, in prevalence of fog, in force and type of air-movement, and in aridity.

Some districts have a moist, marine climate almost the entire year, varied by infrequent, short periods of great heat without humidity. Such places have little frost and few high heat maximums. Other zones are continuously dry or arid, except during definite periods of precipitation; but temperature extremes are often excessive and the record of mean heat very high. Various regions have mild winters, with 20° Fahr. as an average extreme minimum, but dry summers with high mean and maximum temperatures. Certain sections afford very severe winter frosts, and others almost intolerable dry summer heat. In a few locations, hot, scorching winds blast foliage and occasionally visit the coastal areas. Heavy winds are very continuous elsewhere, and damp winds now and then give us concern near the ocean. These diversified conditions are caused by the influence of the ocean, altitude, and by desert conditions forced by areas of pressure toward the Pacific.

In addition to general factors, local topography exerts a tremendous effect everywhere, as, for example, where high hills give protection from dry, blasting winds or those of extreme dampness, and from gales. Air-drainage is very important, providing immunity from frost felt in adjacent land without such drainage. In canyons where air-movement is dammed by tortuous, winding outlets, frost is backed up, and land is much colder than on high levels where the frost drains to lower ground, or in canyons with clear outlets.

In other words, one may find almost any climate in California except mucky, humid heat, or severe, damp cold, without precipitation; one may secure minimum frost, minimum heat, and a small range of temperature where climatic discomfort is negligible; but, on the other hand, it is possible to experience blasting, almost unbearable, dry heat or very severe cold.

One factor not generally understood is that during a great part of the year the sunlight in most districts is close to 100 per cent. This light is very intense and has considerable effect upon the lasting qualities of roses and the fastness of their color.

But the effect of the climate on rose characteristics is much the same in the Golden State as elsewhere, and growers should understand what to expect, and provide varieties best adapted to succeed under the conditions expected.

The centers of population are situated, as a rule, along the ocean front or in contiguous localities of low to reasonable altitude. The frightfully hot interior valleys of low elevation are sparsely settled, and are not used to any extent except as winter resorts; while regions with high altitude have few resident inhabitants, but are in turn visited in the summer by campers for love of the outdoors, or in winter, when certain resorts are popular on account of winter sports afforded.

No axiom may be advanced; nevertheless, proximity to the sea provides cool dampness, and the ocean influence becomes less apparent as one goes inland, where greater dryness and more heat exist; but increasing altitude tempers the heat in summer, makes the winters colder, and increases the amount of precipitation. Furthermore, rain along the coast and winter frost increase as one goes north.

These contrasts are most remarkable because heat and cold, humidity and aridity, are found close together, a few miles making a change from one extreme to the other.

This short description is only a faint outline of the California climate, the dominant thought being that the state enjoys many climates, and that great diversity of choice is to be found within short distances. Consequently, there should be a thorough understanding of the local region before roses are planted.

Certain varieties of roses prove very successful at one time of year and are without merit in other seasons, especially where it is dry in summer and damp in early spring and late fall; but roses which are not seriously affected by heat or dampness will give reasonable satisfaction in many situations over the entire year. In all except greatly elevated districts, the long growing season makes it important to secure roses which retain their foliage, and where thrip appears it is most advisable to plant

types which are immune, or nearly immune. As a general rule, varieties with thick petals which open easily are least troubled by it, but in dry heat thrip is not generally a serious menace. Balling and mildew are to be guarded against in zones with damp ocean influence; frost is hardly ever extreme; blighting, hot winds are rare. In such places, foliage must be impervious to mildew, and varieties with blooms of medium petalage are desirable. Lasting is of paramount importance in dry, hot districts, and flowers of full petalage are required; altitude regulates cold, heat, and length of growing season. Except above 3,000 feet, hardiness is of little importance.

In such temperate areas, roses with but one period of bloom are not worth consideration. (In this connection, it must be noted that many Hybrid Perpetuals prolong production, and some hardy climbers give scattering flowers after a longer spring season of bloom than in the East.) Nevertheless, the average, hardy, one-season climber, decorative or dwarf, should not be planted, because so many other classes bloom throughout the year, and because hardiness is not needed.

The everblooming tender climber is superior to the everblooming dwarf in the coastal belt, and this refers most especially to the best of the Hybrid Tea climbing sports, which are very much better here than those grown in the Central East. The best of the Teas and Climbing Teas and Noisettes are very desirable except for exhibition purposes, and such classes are nearly always clothed with foliage and graced by flowers. In the coastal belt they attain great growth, and careful, skillful pruning secures long and strong stems on many plants.

Roses which require low, hard pruning to obtain flowers of exhibition value generally lose their leaves after midsummer, and one must decide between having a few superlative cutting varieties for a short period, with less foliage in late seasons, and many fair cutting roses and foliage retained much longer.

Nearly all Pernetianas and Hybrid Teas with Lutea (*Rosa fœtida*) blood lose their leaves much sooner* than pure Teas and other Hybrid Teas. This applies to climbers and decoratives as well as dwarfs. Nevertheless, in choosing a representative

*Attention is called to the statements relating to this foliage loss in Mr. Nicolas' article on page 179.—Editor.

list for vicinities near the coast and neighboring sections of reasonable altitude, one must include the desirable varieties of a number of classes, as well as types indicated for those regions. Hybrid Perpetuals which give continued production are very attractive, selected Hybrid Teas rival Teas in quantity of bloom and retention of foliage, some Pernetianas are worthy, and a number of Gigantea hybrids are remarkably prolific and beautiful as decoratives.

No general rule applies. Each rosarian will discover roses which are desirable with him and undesirable for his neighbor a few miles away, and his neighbor may have satisfactory kinds which are mediocre with him. Local peculiarities do not invalidate the rule that adaptability of certain rose qualities to specified climatic restrictions is most important. Such variations enforce the necessity of choosing suitable varieties for each place to attain superlative results. Here, as everywhere, there are a few roses which give average results for everyone.

Last, but by no means least, one must consider giving or withholding water to enforce dormancy of roses in a climate where there is no winter rest. In the winter or rainy season the temperature may go slightly below 32° Fahr. in the coastal winter. During the day, the strong sun is conducive to continued growth, and activity is encouraged by the precipitation. There is a great diversity of opinion concerning forced summer dormancy; at one time it was considered necessary, but the behavior of plants receiving no special care when growing on watered lawns proved that, in certain instances, roses did very well without summer rest. This subject must be dealt with in conjunction with local conditions, which include the necessary treatment of grass, plants, and trees nearby, but most especially concern the type of rose itself.

Teas require little if any summer dormancy, and this is another argument in their favor. Hybrid Teas insist upon a certain amount of dormancy, if left to themselves, by dropping their foliage. This also applies to Hybrid Perpetuals. Pernetianas "die back" and are more subject to defoliation than the others.

Many persons believe that a very light pruning before the fall rains commence, and a slightly harder cutting after February

1, provide the best way to obtain sufficient dormancy, but even under such careful systems, the Tea is intolerant of the knife. This applies to Climbing Teas and Noisettes as well.

In dealing with forced dormancy, as in other matters connected with rose-growing, the varied climates require varied cultivation and pruning, as well as adaptable varieties. Although these differences are often close together, there are many large zones over which the climate is uniform and where certain rose characteristics give constant and similar reactions. In the moderate semi-tropical belt near the Pacific, rose-growing is a joy the year round, and most classes may be cultivated with success, Rugosas and Mosses, perhaps, being the only exceptions. Types of soil, exposures, shade as protection, mulches, understocks, value of own-root roses, depth of planting, feeding, sprays, and the like, are just as important in this state as in others and must be considered in conjunction with climate.

California as a Rose Paradise

By FORREST L. HIEATT, President of the San Diego Rose Society

THE padres and the conquistadors must have sensed what the congenial California climate promised for the rose-culture of the future by the way their loved "Rosa de Castilla," brought from Spain, flourished here in the early days. The Rose of Castile has all but passed from our midst, but not the roses of the "Forty-niners" and the pioneers of the American settlement, for we have very tangible evidence of their love for the Queen of Flowers in the fine old specimens of Lamarque, Niphetos, Safrano, Duchesse de Brabant, Beauty of Glazenwood, Banksia, and the like, that are scattered over the state. Some climb trees as high as 60 feet; others cover houses and wind-mills; some are veritable trees themselves, with a spread of 8 to 10 feet; while others have trunks 4 to 5 feet around. One might easily imagine these patriarchs were centurians, if not reminded that the date of their advent is something less than a hundred years ago.

It is not to these old roses, particularly, that I desire to call attention, but rather to the California of the Twentieth Century, realizing its place in the rose world and increasing its interest

PLATE XI. Vase of the new Hybrid Tea rose, MISS ROWENA THOM
Photograph supplied by Mr Forrest L. Hieatt, San Diego, Calif.

PLATE XII. Partial view of the seven-acre Rose-Garden at Exposition Park, Los Angeles
Planted by Howard & Smith and contains 17,500 plants arranged in beds of 100 each. Grass walks between beds
Photograph supplied by Mr. Forrest L. Hiatt, San Diego, Calif.

in rose-culture—the California that is rapidly becoming a land of roses as well as a land of poppies.

The slogan of the American Rose Society, "A rose for every home, a bush for every garden," is very close to realization in California, for wherever one turns there are roses—all the old favorites as well as the novelties. Roses bloom every day in the year, not so abundantly in January as in April, May, and June, but there are lots of roses, nevertheless.

Who can deny that California is a rose paradise, when, as I am writing this (January 8), the breezes waft the fragrance of the rose-garden into my study, and I look out upon a riot of color; when there is the tender Gigantea hybrid, Belle of Portugal, climbing 25 feet over a pergola, full of exquisite buds and blooms, and one can see everywhere Reve d'Or, Mme. Alfred Carrière, Climbing Sunburst, Climbing Mme. Caroline Testout, Climbing Cécile Brunner, and others on porches, pergolas, and bungalows, with masses of bloom in compliment to the warm January sun; when, at our rose-dinner last night, the tables were adorned with hundreds of blooms from the members' gardens; when Pasadena's fortieth annual New Year's "Tournament of Roses" was more gorgeous, and staged on a grander scale than ever; when San Diego can successfully stage Thanksgiving shows for roses exclusively, with the quality fully up to exhibition standards?

Our cities are fast realizing the civic value of public rose-gardens, and are establishing municipal rose-gardens as a particular feature of their park systems. The most notable of these is the rose-garden in Exposition Park in the city of Los Angeles. There, 7 acres are devoted to a garden, with some 17,500 rose bushes, planted in beds of about 100 each, with grass-plots between. This garden was planted in 1927 by Howard & Smith, well and favorably known nurserymen, and in it are all the popular varieties and many of the novelties that have proved their worth. The accompanying photograph (Plate XII, facing page 137) shows this garden one year from planting, and speaks volumes for the vigor of California roses.

The bed of Los Angeles roses at the rear of the peristyle of the great outdoor organ in Balboa Park, San Diego, has for years been the Mecca of rose-lovers. It has been admired by

hundreds of thousands of visitors to this show-place of the Southland. In 1922, that great rosarian, R. A. Nicholson, of Hong Kong, China, visited San Diego, and was taken by the Park Superintendent to see this bed of Los Angeles roses. Mr. Morley tells that when Mr. Nicholson first saw this wonderful sight he was so filled with emotion that tears rolled down his cheeks—tears of real rose-joy. Mr. Nicholson, in describing this visit for the English Rose Annual, in 1923, said he "had never expected to see such a sight. The bushes were 7 feet tall and many of the blooms, when tried, would not go into my hat without touching the sides."

Many communities in California have featured the rose in highway planting, and roadways are lined for miles with roses.

San José produces annually, under the able direction of Mrs. Charles C. Derby, State Vice-President of the American Rose Society, "La Fiesta de las Rosas," with a floral parade and culminating in a rose show lasting three days.*

It is not these notable rose events or its twelve-month rose season, alone, that gives California the distinction of being a leading rose state. Roses grow more vigorously and are freer from disease here than in most parts of the country. Compare the instructions for planting in eastern catalogues with what is necessary here. Not 12 to 18 inches apart, but three to four feet is required in California gardens. The dreaded black-spot and brown canker are little known here.

California has an enviable place in the "rose-sun" by reason of notable rose creations. When Fred Howard gave us the world-renowned Los Angeles, in 1916, attention was directed to California. Los Angeles was the first American rose to be awarded the coveted Gold Medal at the Bagatelle trials. I think it is agreed that no other rose has attained such widespread popularity. In the referendum of the English Rose Society it has been given top position as a garden rose for five years and has the place of honor in gardens most everywhere.

Following Los Angeles came William F. Dreer, Mrs. S. K. Rindge, Miss Lolita Armour (also awarded the Bagatelle Gold Medal in 1921), Mrs. William C. Egan, Eldorado, Theresa

*See "Rose-Planting in Santa Clara County" by Mrs. Fremont Older, page 159. See also announcement of rose pilgrimages on page 17.—EDITOR.

Morley, Josephine Thomas, and Fragrant Bouquet; and lately Mr. Howard has given us Mrs. Lovell Swisher and Mrs. Erskine Pembroke Thom, named in honor of the wives of two fine rosarians, friends of the originator. Mr. Howard's latest candidate for rose-honors is Miss Rowena Thom,* from a cross of Radiance by Los Angeles. It is little known as yet but it bids fair to take its place in front with other grand roses that are California's contribution to rose-joy throughout the world.

Capt. George C. Thomas, Jr., known to the readers of the Annual through his interest in rose-culture and by his articles and books on the subject, has, at Beverly Hills, probably the largest private rose-garden in existence. Capt. Thomas is conducting many experiments of much value to every rose-grower in the country. He has some very fine new seedlings, as yet unnamed, which promise to be valuable additions to our gardens. Although he produced many new roses before coming to California, I think these California youngsters are the best.

So conducive to vigorous growth are California conditions, that many dwarf roses throw climbing sports, such as Climbing Cécile Brunner, Climbing Hoosier Beauty, Climbing Etoile de France, Climbing H. V. Machin, Climbing Maman Cochet, Climbing Sunburst, Climbing Winnie Davis, and Climbing Los Angeles. More recently have appeared Climbing Constance, Climbing Red Radiance, Climbing Rose Marie, Climbing William F. Dreer, and Climbing Golden Emblem.

California leads all the states in the production of field-grown roses. Some ten million are grown annually, and, of this vast number, 80 to 85 per cent are shipped east to dealers and nurserymen, eventually finding their way into the gardens of every state in the Union.† While a goodly proportion of this production is own-root stock, some of our nurseries bud from 500,000 to 1,000,000 roses a year each. Ragged Robin is mainly used as the understock, and the more particular producers "de-eye" the stock to eliminate suckering. This is an important step in producing first-class budded roses, and all producers will eventually be forced to adopt this custom.

*The official description of Miss Rowena Thom was given in the 1928 Annual (page 245). Flowers of it which we saw the past season were fine. A photograph of some superb specimens faces page 136.—Editor.

†See "Commercial Rose-Growing in California" by Dr. Emmet Rixford, page 168.

This article would not be complete without mentioning the new understock originated by the late D. W. Coolidge, of Pasadena. This stock, which he called "I.X.L.," is a cross of Tausendschön × Veilchenblau and is particularly adapted for standards. It makes a rapid growth, is thornless and easily worked. With I.X.L., Mr. Coolidge originated what he termed "Totem-pole Roses." This was accomplished by putting in buds at short distances from the ground up to 8 to 10 feet. Since the lower buds on this stock grow equally as well as the top ones, a columnar plant is produced that flowers the whole distance from top to bottom. It is a unique sight when these are in bloom, especially if different varieties are used.

In the flower shows held in nearly every city, town, and hamlet of the state, the rose is made the prominent feature. This is as it should be, of course, and shows California's appreciation of the Queen of Flowers. Interest in rose-gardening and in the American Rose Society is being given fresh impetus by the organization of local rose societies in many of the populous centers. Dr. E. M. Mills, the honored President Emeritus of the Society, is responsible for a very active society in Santa Ana, and the rose fraternity will hear much of its work in the future. I believe that the San Diego Rose Society enjoys the unique distinction of being the only local society in the country with a 100 per cent membership in the American Rose Society. This Society of more than a hundred is planning to double its membership this year. It publishes monthly *The San Diego Rosarian*, devoted to the work of the Society and to increasing rose-enthusiasm in the Southland.

Old Roses of California

By ARTHUR P. HOWARD, Los Angeles

ONE morning, last spring, when the California rose season was at its height, I called on Capt. George C. Thomas, of Beverly Hills, to talk roses. Of course, both of us being enthusiasts, we were soon walking through the garden paths admiring and commenting on the different varieties, of which there were at least 1,500.

During the walk through the garden, Capt. Thomas spoke

quite frequently on the wonderful productiveness and growth of the old California types and suggested that, as I was born in California, and am a lover of roses and familiar with the old varieties that are practically unknown in the newer gardens of the state, I ought to tell the members of the American Rose Society about them. So I am thus writing.

As I developed for Capt. Thomas the landscape features about his home, roses became, quite naturally, the chief feature of the garden. I mentioned, one morning, that I knew where there were some real rose trees that were not grafted, but old varieties imported here in the early days, that had developed into trees through years of growth. I explained that the trunks were approximately 5 to 7 inches through, that a person 6 feet in height could walk under the branches without stooping, that the heads of these rose trees spread 10 feet or more, that these rose trees would bear from 1,000 to 1,500 flowers in a season, and that, in addition to these striking features, the rose trees were forty-five years old. His answer was, "Go and get them!"

I found it possible to arrange at Pomona, a town about 30 miles out of Los Angeles, for ownership of the two great "Laurettes" to which I had referred. To move these plants successfully was some task! We had to excavate liberally about the plants, and box them with 2-inch lumber. These boxes were 3½ feet deep by 4 feet wide. The estimated weight of the two rose trees, made ready for delivery to their new home, was approximately 6,500 pounds, or over three tons!

While negotiating for one of these roses, I asked an old gentleman who lived in the cottage how old the rose was. He advised me that he had lived in that house for forty-two years and that at the time he came there the rose was of considerable size—he thought about ten years old.

When Capt. Thomas saw these specimens on the truck in his driveway, he was so elated that he told me to go out and get all the big roses I could find in these "old-time California types," as they are now referred to. Consequently, we brought in, in addition to the Laurettes, a great many varieties, none of them quite so large as the original two, but many in boxes that weighed 1,000 to 1,500 pounds each. Many of the plants were very old. Of the entire lot, only one or two of these old-timers

were lost in transplanting, and if eastern members of the Rose Society should ever have a chance to call and see Capt. Thomas' great garden, they would marvel at the beauty provided by these great old plants.

Catherine Mermet, Marie van Houtte, Mlle. Franziska Krüger, Mme. Lambard, Safrano, Mme. Abel Chatenay, G. Nabonnand, Gloire Lyonnaise, Souv. de Catherine Guillot, Marquise de Querhoënt, Clara Watson, Peace, Agrippina, Bougère, Triomphe de Luxembourg, Duchesse de Brabant, Comtesse Riza du Parc, Red, White, and Pink Cochet, are among the finest bush varieties of the old-timers. I presume it is rather hard for eastern rose-lovers to visualize Cochets in the bush form anywhere from 8 to 9 feet high, with 100 to 200 blooms on them at one time! No doubt it would also be hard to visualize these tender varieties in full bloom in late November, but so they were! In southern California you can pick flowers from most of these old roses every day in the year! In the various neighborhood estates and gardens where roses are grown, types that are considered the most tender in the East, here have better foliage and more flowers than the hardier Hybrid Teas.

Probably even more noteworthy and conspicuous than these bush varieties are some of the grand old climbers that have covered trellises, porches, and fences. Mme. Alfred Carrière, Lamarque, Gloire de Dijon, James Sprunt, William Allen Richardson, Cloth of Gold, Gold of Ophir, White and Yellow Banksias, Reine Olga de Würtemburg, and many other old varieties have stood the test of time and have never been surpassed in the great quantity of blooms produced.

In the development of southern California, many of the old haciendas and ranches have passed into the hands of the realtor and subdivider, and in this day of commercialism little thought has been given to saving the trees and flowers. As a consequence, many a fine old garden has been sacrificed. With the gardens that have passed out of existence, hundreds of the old varieties described were lost. Fortunately, the early comers to California who could only afford smaller places, loved roses too, and in the older parts of Los Angeles and other nearby towns one may still see cottages with their fronts almost entirely covered with Lamarque, Reve d'Or, and similar varieties.

Particularly in the districts of Pomona and Ontario, there are still left many specimens of these fine old roses, as well as giant plants of Laurette, Lamarque, Catherine Mermet, Mlle. Franziska Krüger, and others that are almost forgotten, as far as the rose world is concerned. Indeed, many of them are out of commerce, having been supplanted by the later Hybrid Tea and Pernetiana types, which produce flowers of finer form and longer stem. Gardens more formal in aspect have taken the place of the old-time, rambling California gardens, and varieties that can be kept within bounds are in greater demand.

Admitting that the newer Hybrid Teas and the Pernetianas surpass the old Teas in perfection of bloom and length of stem, we must also admit that the foliage of these older Teas is generally far superior to the newer types. Practically all of the old Teas mentioned hold their foliage throughout the entire year, it is more luxuriant than that produced by Hybrid Teas, and the bushes themselves are therefore much more ornamental. Also, the foliage is far more disease-resistant, probably due to the great vigor of the growth, while in point of fragrance they are certainly not to be outdone by their later rivals.

The old-fashioned roses that have their own way grow the best. Except for a thinning out of the dead wood and cross branches, little pruning is required. Some of the best specimens I have ever seen, of monstrous size, were never pruned at all.

Recently I passed a shop where a rose sale was in progress. The window was well placarded with many colored plates from various catalogues. The attention seemed mostly drawn to a picture of two beautiful red roses without name. I recognized the subject as a picture of that old favorite, Gloire de Margottin. The signature under the roses was that of the artist "Paul de Longpré," who lived long in Los Angeles, and during his lifetime was probably the greatest of flower-painters.

A remarkable advance has been made in rose-hybridization, and many wonderful varieties have come on the market, but if any real rose-lover who comes to southern California should drive out one of our country roads in late April or early May and come upon some unpretentious cottage literally smothered with these fine old climbers, and in addition see some of the giant Teas in full bloom, he will assuredly receive a real thrill.

Roses in California

By LOVELL SWISHER, Los Angeles

WHEN I was asked to write about the above subject, so many aspects of the rose flashed into my mind that I wondered just what typified the "Roses in California." I thought of the beautiful gardens of Capt. George C. Thomas, Jr., with terrace after terrace of roses nestling in the foothills of the Santa Monica Mountains, and I said to myself, "Surely here are the roses in California!" Then I recalled the San Fernando Valley, with its hundreds of acres of roses, making one huge rainbow of color, and it seemed that there were the "Roses in California." And the picture of Exposition Park,* with its 7½ acres of roses, full of such recent introductions as Dame Edith Helen, Lady Florence Stronge, Cuba, Mrs. Lovell Swisher, Mrs. E. P. Thom, J. Otto Thilow, Miss Rowena Thom, and the like—a garden where on a single Sunday afternoon over 25,000 visitors passed through the turnstile, and where over 350,000 visitors view the gardens during the year—and I thought surely there must be the "Roses in California."

But to me, "Roses in California" are my friends and daily companions, the roses that bloom in my own rose-garden.

There is a wide range of temperature throughout California, from the frostless, protected areas to the snowclad higher altitudes. In southern California, the soil varies from very heavy, rich, black adobe to light, sandy loam and disintegrated, granite soil. Needless to say, the rich, heavy soils are most prized for rose-culture. Such a soil, with enough cool weather during December and January to enforce dormancy, provides perfect rose conditions, including, of course, plenty of water.

There has always been some disagreement regarding the manner of irrigating and cultivating, and I presume there always will be. I have tried both methods and prefer overhead sprinkling, followed by shallow cultivation, with a top-mulch during the hotter months. By overhead sprinkling I mean, not frequent light applications, but a heavy night sprinkling which really amounts to overhead irrigation, leaving the water run long enough to soak the ground at least 3 feet deep.

*See illustration facing page 137.—EDITOR.

I do not believe in summer rest, or a forced dormant period during the fall or summer. Some of the best wood is grown during July, August, and September. I believe in a very severe pruning, which usually is done in the latter part of December or the first of January. I have noticed a tendency on the part of a great many gardeners to plant roses too shallow. Planting at the proper depth is a very important item, particularly in the warmer sections of southern California. But conditions are so different in each section of California that I am only reporting my own experience in a frostless, protected situation in the Hollywood foothills, with a light, disintegrated granite soil.

Some years ago I decided to limit the number of varieties and grow at least six of a variety. I have found this policy most satisfactory and still follow it. In consequence, there are only twenty-five varieties in my garden. This, in itself, prevents me from making any just comparison of the newer roses; but I do discard and replace each year. Of the new roses, I am particularly fond of Dame Edith Helen, having had some of the most perfect flowers from this variety that it has ever been my pleasure to grow. For dependableness in all respects, the best performers in my garden are Mrs. Lovell Swisher, Los Angeles, Souvenir de H. A. Verschuren, Hadley, Mrs. E. P. Thom and Rose Marie. Without doubt, the most satisfactory rose in all sections of California is Los Angeles.

Some New Roses in Southern California

By JOHN A. ARMSTRONG, Ontario

IN CALIFORNIA, as in all sections of the country, the rose-lover will never get over that intense passion to try out the new rose introductions, so many of which are placed on the market each year. We all enjoy the beauty of the old standard kinds as much as ever, but it is human nature to want to explore in strange paths, to find something new and different. I am not one of those who condemn all new roses because so many of them are worthless or nearly so. We have had some remarkable new roses during the past few years, and in my own favorite list of the twelve best roses for southern California there are five which have appeared since 1920.

It has been my pleasure to observe most of what are considered the best new roses within a short time after their introduction. We are located 60 miles from the ocean, in an interior valley, experiencing the usual warm, dry weather of a California summer, with some fogs in the spring and fall. While some roses, of course, will thrive better under certain climatic conditions than others, I believe that, for the most part, the good and bad qualities of a variety as displayed in southern California will show up also in Wisconsin, Pennsylvania, Tennessee, and nearly all other sections of the country.

The majority of the best new roses have probably been in the yellow shades. Taking all things into consideration, I believe that Ville de Paris is the best of the newer clear bright yellows. The flowers are too round and globular, but the color is fine, they open well, and the long, wiry stems are clothed with the finest of shiny, leathery Pernetiana foliage. Mabel Morse may have a better-shaped bud and the color is just as good, but the bush is too low and weak. Julien Potin, supposed to be an improved Souvenir de Claudius Pernet, has by no means justified that description yet. The bush has been weak and the flowers small and ordinary, so far, but I have observed it for only one year and it may improve. Henry Ford is hardly worth trying. Mary Pickford does not produce enough flowers, but still is a favorite. The buds open up beautifully, and while the deep yellow at the center fades to almost white on the outside petals at times, I rather like that color combination. And you can always count on having a strong, tall bush and stout stems. Mrs. E. P. Thom may turn out to be better but I am not yet prepared to say so.

Golden Gleam has a lovely golden bud, lavishly streaked with crimson, but it is almost too much like the indispensable Golden Emblem, which, by the way, is undoubtedly the most popular rose of any color in California gardens. Golden Gleam is far ahead of Roselandia, which certainly has not lived up to the many fine things that have been said of it elsewhere.

Frank Reader is a good light yellow, and Richard E. West is the best straw-yellow here, but while both have good growth and well-shaped flowers, the colors are somewhat washed out and lack character. I much prefer the new and little-known

Barbara Robinson, which has a dainty little creamy bud with wavy petals. It is not a rose that would ever become widely popular, but it is a variety that one can become very fond of. Cecil, a single, light yellow of fairly good size, shows promise.

Then we come to all those intriguing shades of orange, apricot and salmon which the hybridizers have showered upon us recently. The one which is easily the best for California conditions is Feu Joseph Looymans—a marvelous rose here, with great, long buds of orange and apricot, produced on long, straight stems. If it does half as well in other sections, it will still be better than most kinds in this color. It is one of the few varieties which do not always make a perfect union on Ragged Robin roots, and it may require some experimenting to find the right understock for it. Angèle Pernet is hardly new any longer, but there is nothing yet to equal the marvelous color which will keep it a favorite in spite of the fact that the plant is far from strong. Norman Lambert is certainly a sensational color-combination at its best, in apricot-yellow, edged with the brightest crimson,—and while the flowers are a bit shapeless and open quickly, it will be liked. Much the same in type is Marion Cran, another highly colored rose (from the same producer) having an exceedingly striking color contrast—deep buttercup-yellow, margined with rose. It opens quickly and the flowers are not large, but we cannot get everything in one rose. Duchess of York is a fairly good mixture of colors, but Duchess of Atholl with a predominating shade of golden orange, is better. Mrs. Talbot O'Farrell is a highly colored little bud, but you have to look quickly or it's gone. I Zingari and Gwyneth Jones are beautiful and original colors—positively dazzling, in fact—but they have no pretensions to form. Captain Ronald Clerk has somewhat the same color, a little deeper in tone, and also has a beautifully shaped bud. I had great hope for it but, unfortunately, after the first year, it rapidly dies back to nothing. Cuba and Padre run a close race; both are good, and if you have one you practically have the other.

Mme. Albert Barbier has become a favorite during the last two years. I have never yet seen a poorly shaped bud or flower, and the exquisite coloring of salmon, flesh, and apricot is beautiful from the time the bud starts to open until the petals fall.

Although a Hybrid Perpetual, it does not grow tall but makes a short, stubby plant here, with stout and heavy stems. Somewhat of the same general type, although a Hybrid Tea, is Reims, which is a lovely rose in my opinion, with its flat, imbricated petals and soft coloring, and worthy of more attention.

The few good new red roses just about lead the parade. Etoile de Hollande is the best, and Lord Charlemont is much like it. They are fine roses; I often wish that the foliage were larger and handsomer. Miss C. E. van Rossem, not particularly new, is a very desirable red rose, has plenty of foliage, but is rather susceptible to mildew. It produces large quantities of small but ideally formed buds of full petalage.

Vesuvius, with its beautiful, single, dark crimson flowers, is remarkably satisfactory here, growing rapidly into a tall, vigorous bush and blooming continuously. The big, velvety blooms of John Russell, on their long, tall stalks, are fine, but they seldom appear. Then there are a half-dozen kinds which are reported as fine in some sections, but here none of them are more than ordinary red roses, no better than many older kinds. In this group I rank Bedford Crimson, Irish Charity, Irish Hope, Irish Sweetness, and Sir David Davis. Irish Sweetness and Irish Hope are delightfully fragrant, however. Margaret McGredy is not a true red, but whatever the shade may be called, a bed of it makes a fine show of color.

Among the new pink roses, I cannot say too much for Dame Edith Helen. It is one new variety that, in California, at least, has lived up to the advertising given it. It has everything—color, size, fragrance, vigor, long stems, and good foliage—and is a most satisfactory garden rose. Mrs. A. R. Barraclough and Mrs. W. E. Nickerson are both very fine pink roses here, and have buds and flowers much above the average in size. The texture of the petals in the case of Mrs. A. R. Barraclough is damaged rather easily by moisture or heat.

Quite different from these is Mrs. Lovell Swisher, for instead of big, loosely formed, large-petaled flowers, this one has graceful, symmetrical, salmon-pink blooms, not strictly of the Ophelia type but somewhat similar. It is one of our best new light-colored varieties. Mrs. Henry Bowles has a few too many petals and is inclined to be top-heavy, but it is a very good rose.

Ivy May and Mrs. J. Heath are Ophelia sports. The latter is a unique color but does not bloom enough, while Ivy May is above the average in rose-pinks. Irish Charm and Irish Morn are lovely flowers and well worth growing, while Pink Pearl, of Columbia type, is immeasurably superior to Columbia, and its intense fragrance makes it valuable. Doris Dickson and Empire Queen are hardly worth continuing long here. Wilhelm Kordes is a very interesting rose because it changes color with the weather, like a chameleon—sometimes pink, sometimes yellow, sometimes red predominates, and it is beautiful at all times. The plant is not overly vigorous and the neck is a little weak, yet it is one of the finest new roses for California.

Of course, we can get along with Kaiserin Auguste Viktoria and Frau Karl Druschki for white roses, but we need one or two more. White Ensign is a dainty little rose of good form, crowded with feathery little petals, but the bush is rather small. Marcia Stanhope, while fair, is not outstanding. Innocence, with its slender buds and creamy white, almost single flowers, is excellent here, and distinctly different, but I wish it bloomed more, in order to be of real value.

There are a few standard older roses which no rose-lover in California would be without, such as Golden Emblem and Hoosier Beauty, which do not get the same universal approbation in other sections. Thus, there may be some of these newer kinds I have praised which may be particularly adapted to our arid, sunny California, and which will not give the same satisfaction elsewhere.

I heartily agree with an article in the 1928 Rose Annual contending that too much stress has been placed upon the "preferred dozen" roses selected by referendum among the members of the Society. Certainly it is most misleading, to California planters in particular, to leave out of such a list varieties like Dame Edith Helen, Etoile de Hollande, Rose Marie, and Golden Emblem, none of which could possibly be omitted here, and include Columbia which ought to be discarded nearly everywhere. Gruss an Teplitz, Radiance, and Red Radiance have their places, but not in the best dozen roses, for there are thirty or forty varieties that would rank ahead of them for popularity and real merit in California.

California Garden Practice

By CLARENCE G. WHITE, Redlands

MY GROUND has been a very heavy soil about a foot deep, underlaid with some red stuff like puddled and compressed clay, in which no roots grow. I have recently adventured into a ravine where, by terracing, I get a stiff, sandy loam 5 feet deep. The planting there is very promising and may alter my entire notion of things rosy.

Because it carries weeds, blights, and bacteria, which the winter is not severe enough to counteract, no manure comes into the garden. It is replaced by bone-meal, other commercial fertilizers, alfalfa straw, and German peat in large quantities.

This peat is sterile, free from seeds, flies, and other pests, and it lasts. My top-soil is rapidly getting so that I can put a trowel into it at any time. I get this imported "torf mull" at $28 a ton delivered, in 10-ton lots. Local peat costs the outrageous price of $15, is full of weeds and alkali, and is not a quarter as good in quality or results.

Plant-food and peat are spaded lightly into the soil after pruning. Several other times a year, the roses are dosed by means of a two-handled corn-planter which has a fertilizer-distributor attachment. This puts small amounts around the bush 2 or 3 inches underground. It is easily done, and putting fertilizer under the ground is the best policy in this country. I gave up liquid fertilizing long ago because of the labor. It is not needed in my practice and desires. Heavy applications of potash have not yet rendered my bushes immune to mildew.

Yellow roses, as a rule, come pale with me. I have been trying applications of oxide of iron, and if that does not improve the color, I shall try soot, with check plants, of course. It is too early to state what this may do to them.

In planting I do not bury the bud; sometimes the root-stalk projects a little above the ground at first. Suckering is no worse than with deeper planting. An occasional sucker comes anyway, and is of small importance except where attention is given the garden only once in a while. I have just read in an English publication that suckers should not be cut, but torn off. In any practice the job needs to be done thoroughly.

The big pruning is done in December and January. The thrifty-growing bushes have their stalks cut back no further than the length of a lead pencil; strong shoots with a terminal bud are not decapitated at the same time. Treated this way, the bushes produce more good blooms and live longer than under more drastic use of the knife. Weak bushes get softer treatment than this. Sickly and misplaced growth is cut out, regardless of size.

I have just been out pruning for two days, and have been revising my ideas somewhat, in consequence. For instance, this morning, the matter of my judgment of what is a good bud to prune to, came up. I discarded some last-year notions and moved still further away from my first conception, years ago, that a live bud and a good bud are the same.

The philosophy of pruning roses is to get what you are after. If the desire is shapeliness of bush, the practice is different from what it would be if a few best possible blooms were sought. I strive for merely good blooms. Such flowers do not grow on weak shoots and branches, so these are all cut off. I seek for a vigorous bud, preferably starting from a branch about the size of a pencil, and cut to it. If there are none such on a stem of a vigorous bush, the whole stem comes out, no matter how many twigs and leaves it has.

Climbers are merely restrained, and superfluous sprouts cut, unless used entirely as bloom producers. Roses of Hugonis type have merely the oldest stems taken out. Disbudding is not rigorously practiced. Blooms are cut with long stems if possible, leaving a stub with an eye or two on it.

I have seen or tried about everything suggested for labelling plants. Some are too temporary, some too conspicuous for a private garden, some too expensive. My choice is a zinc label, 4 x ¾″, wired with copper to a 30-inch galvanized No. 5 wire stake, eyed at the end. This is durable, can be hidden in the foliage, and, if placed always on the same side, can be found when wanted without too much difficulty. Galvanized iron labels are not so good. Both sorts need a slight scouring with steel wool or some similar abrasive, before inking.

There are some good metal inks on the market. The best I have tried is platinum chloride, 16 grains to an ounce of dis-

tilled water. It is expensive. A hardwood point is used to apply it.* My next choice is a solution of bluestone and muriatic acid, also put on with a stick. It seems to do the business but is far less pleasant to handle. A commonly advocated ink is copper subacetate one dram, ammonium chloride one dram, lampblack one-half dram, water ten drams, mixed thoroughly. The instructions are to use with a steel pen, often wiped.

My rose-garden has taught me three outstanding things:

(1) That it seems impossible to get too much humus into our soil;

(2) That growth is better in this climate under partial shade (one-third slatted protection seems ideal); and

(3) That I must fight mildew at once, wherever and whenever it appears.

In winter, when particular about foliage, I use Fungtrogen; when not, lime-sulphur. When the weather becomes warm, a dusting of sulphur is best and easiest. I use a new sort, made by the gas-works in San Francisco, looking more like ashes than common sulphur. It is very active and adhesive. Even delphinium rust flees before it, though never before have those plants been clean. I have lost the trade name, but the Western Sulphur Industries Inc., of San Francisco, sells it. It is my best bet when the weather is warm enough for any sulphur dust.†

Irrigation is healthier than sprinkling.

I emphatically do not believe that a period of summer aridity, sufficient to throw the bush into a dormant state, is a good thing in Redlands.

Of course, my experience is confined to my own garden in Redlands, and I am afraid it is too narrow to be useful to everyone; especially since I am not in any too close agreement with the rose fanciers here in regard to suitable varieties.

*Here comes in some years of experience, to say that 10 grains of platinum chloride to four ounces of water will do the trick, and will last any ordinary rose life-time—that is, the life-time of the rosarian. Also, a clean gold pen is perfection for writing. The platinum is at once deposited on the polished zinc, and it is there to stay—so much so that hard rubbing on an emery surface is necessary to grind it off. After fifteen years, these labels are fully legible when cleaned.—Editor.

†A letter from the Western Sulphur Industries Inc., No. 1 Drumm St., San Francisco, advises that the material furnished Mr. White was made from black-gas sulphur, and is known as "Super-Poppy" Dusting Sulphur, which consists of 80 per cent Poppy Sulphur ground to pass through a 200-mesh sieve, and 20 per cent colloidal sulphur. The Western Sulphur Industries Inc. did not reply to a suggestion that they advertise this product in the Annual but doubtless they will willingly answer any questions and fill any orders sent to them by members. See also the new green sulphur compound mentioned on page 33.—Editor.

PLATE XIII. The English Gold Medal and Certificated Roses, 1928

Above, Chaplin's Pink Climber — *Above*, James Rea
Below, McGredy's Scarlet — *Below*, Edith Nellie Perkins
Photographs by courtesy of Mr. Courtney Page

PLATE XIV. The English Gold Medal and Certificated Roses, 1928

Above, Portadown Fragrance
Below, Mevrouw G. A. van Rossem

Above, Souvenir of the Old Rose Garden
Below, Violet Simpson

Photographs by courtesy of Mr. Courtney Page

I endured the two Radiances for five years, without joy, because the Rose Society estimate of them did not materialize. Lately, blooms of both in the local show and elsewhere have been fine, seemingly not akin to mine in color or shape.

I have been told, not knowing how truthfully, that the pink Radiance is on the market in two distinct types; and also that the variety needs a sandy soil for best results.

Full-petaled roses, almost without exception, have been failures or near-failures with me; the blooms are so seldom good.

I have never found mildew on Antoine Rivoire. Dr. Huey, lovely, floriferous, and long-blooming, has gone to the incinerator because it always acquired mildew before any other.

I keep a little day-book and mark the roses that perform delightfully with two stars and those that are satisfactory with one. Memory is not good enough to keep tab otherwise. It takes a whole year to know whether a well-established rose is a good actor at any one period. Some roses like cool weather, some hot; some spring, some fall. In general, the fuller blooms prefer the heat. There is at least scattering bloom every month of the year, except in the unusually cold winters.

If I could have but one red rose it would be Etoile de Hollande, but there must be a misnamed sort in circulation, for a neighboring nurseryman shows a very commonplace red variety under that name. As a general statement, red roses give the greatest number of good blooms for me. If I could have but three roses, Angèle Pernet would be one of them, on performance and delight. Lulu is of great value, lovely at all stages, blooming liberally several times a year. The bush is thrifty. Duchess of York has a color as glorious as the heart of a Sunstar bud.

The bulk of my two-starred treasures, taken as I come across them in the day-book, are: Mrs. Aaron Ward, Louise Baldwin, Florex, Modesty, Mme. Alexandre Dreux, Bedford Crimson, Red-Letter Day, K. of K., La Champagne, Roselandia, Amélie de Bethune, Fontanelle, Hoosier Beauty, Hadley, Isobel, Mrs. George C. Thomas, Imperial Potentate, Cuba, Vesuvius, J. Otto Thilow, Senator, Julien Potin, Hawlmark Crimson, Queen of Fragrance, Betty Marchand, Westfield Star, Feu Joseph Looymans, Phœbe, Sunstar, Innocence, Flame of Fire, Mabel Morse, Mrs. Wakefield Christie-Miller, Wilhelm Kordes, Lady Florence

Stronge, Golden Ophelia, Ophelia Supreme, Aspirant Marcel Rouyer, Etoile de Feu, Royal Scot, Florence L. Izzard, Marion Cran, Mrs. Charles Bell, Mrs. A. R. Barraclough, Barbara Robinson, and Clovelly.

Among those I have discarded this year are: Mrs. J. C. Ainsworth, Lady Inchiquin, Patience, Irish Sweetness, Pink Pearl, Columbia, America, Gorgeous, Senateur Mascuraud, Miss Amelia Gude, Mrs. Charles Lamplough, Sensation, Briarcliff, Mrs. William C. Egan, Mrs. George Shawyer, Mme. Edouard Herriot, George C. Waud, and George Elger. Some of them I shall try again in the ravine. I condemn none of them outside my fences!

Combating Heat in the San Joaquin Valley

By R. O. MacDONALD, Lindsay

MY EXPERIENCE has taught me that roses do best in this hot valley if they are planted with the bud exposed and are given the protection of partial shade during the warmest weather.

I have some two hundred fifty roses. For many years I was guided by the general opinion that budded stock should be planted with the bud about 2 inches below the surface of the soil, but last year, in planting a considerable number of new varieties, some were unintentionally left with the bud above the ground. By fall I noticed that those plants were much better developed, both in growth and bloom, than deeply planted stock which had received the same care. Many deeply planted bushes are now 4 inches down because the successive applications of manure have raised the ground-level.

Since reading recent articles which condemn deep planting, confirmed by my own observation, I have excavated the buds of all my roses by opening a basin around each plant sufficiently deep to expose them. I shall probably fill these basins with coarse straw in order to keep them from filling in with earth. This will allow the buds considerable air and also keep them dry between irrigations. It is interesting to note that in this citrus-growing district many instances have occurred where orange trees which were doing poorly were found with their buds buried

deeply, and excavating them often brought about a marked improvement in their general condition.

With reference to partial shade for roses, my experience confirms recently expressed opinions. The months of June, July, and August here are very warm. For the past two summers I have stretched an awning, made of cheese-cloth or coarsely woven burlap, over a part of my beds which eliminates about one-half of the sunlight. It is amazing to note how rapidly and abundantly the bushes respond to this partial shade during the warm months. It is no exaggeration to say that in both growth and blooming the roses are 100 per cent better under cover than open to the sun.

The varieties which do best in the hot climate of the San Joaquin Valley are as follows:

Red: Crusader, Etoile de Hollande, Hoosier Beauty, Sensation, Mrs. Charles E. Russell, Red Radiance, Hadley (when not too warm).

Yellow: Golden Emblem, Rev. F. Page-Roberts, Mrs. Aaron Ward, Sunburst, The Queen Alexandra Rose, Mme. Edouard Herriot (Daily Mail).

Pink: America, Silver Columbia, Jonkheer J. L. Mock, Rose Marie, Premier, Mrs. Wakefield Christie-Miller, Miss Cynthia Forde.

Numerous other varieties do well but these are outstanding successes.

Roses of Monterey

By FRANCIS E. LESTER, Monterey

FIRST of all, let us discuss the *old* "Roses of Monterey"—the Noisettes that clamber over the historic old homesteads of the peninsula! Here are Lamarque and Chromatella and Mme. Alfred Carrière and Rêve d'Or, generations old, with trunks many inches thick, in all their natural glory, even though uncared for and unwatered during the summer's drought! What stories they might unfold if they could speak our language! Some of these vines and bushes were here in General Sherman's time—the middle of the last century—and, in fact, the original "Sherman Rose" is still living at an artist's home, carefully transplanted from the main business street of the town

when one of its bank buildings was recently erected. By this identical rose bush, General Sherman pledged his troth to a sweetheart who, so the story goes, vainly awaited his promised return. The rose was found to be Chromatella, often called "Cloth of Gold."

The temperate climate of the Monterey peninsula and its light, sandy soil combine to create conditions most preferred by the Noisette roses. Practically all of them flourish here. Speaking generally, climatic conditions in Monterey and its sister communities, Pacific Grove and Carmel, are most favorable to the rose. Of more than 140 varieties, mostly Hybrid Teas, tested by the writer in his gardens during recent years, fully 90 per cent are successful, although care must be taken to avoid sorts subject to mildew. The hardy climbers, so popular in the East, mostly mildew here, but we have more than one hundred better climbers to select from, which cannot be grown in the colder regions.

Among our best Hybrid Tea roses are the following: Angèle Pernet, Cheerful, Honeymoon, Hortulanus Budde, Lady Margaret Stewart, Mrs. William C. Egan, Rev. F. Page-Roberts, Shot Silk, Souvenir de George Beckwith, The Queen Alexandra Rose, and William F. Dreer, all of them growing to perfection.

Monterey's Municipal Rose-Garden* at this date nears completion. Wall, fence, metal arches, and pillars are in place, and the planting will be complete by mid-January, with its 1,300 roses and background of appropriate shrubs. Interesting features are nearby beds of the oldest and the newest roses; the parent and the species roses; mass plantings that fit into a general color scheme; group plantings that represent practically all known classes of roses; and an approaching walk from one of the city's main streets over which is placed a series of thirteen arches, each with its appropriate pair of climbing roses. The whole purpose of the garden is to be educational as well as ornamental; and visitors are furnished with a free guide which describes its chief points of interest.

*The Monterey Municipal Rose-Garden was described by Mr. Lester and a plan of it published in the 1928 American Rose Annual, pages 16 and 17. Attention is called also to the rose pilgrimage announcement for this vicinity as printed in a footnote on page 17. —Editor.

Roses in Central California

By MRS. CHARLES C. DERBY, San José
State Vice-President, The American Rose Society

GARDENING in this Sunny California is just about the hardest work I have ever encountered. I am continually dragging a hose about to water the parched soil, or frantically wielding a hoe, working up a dust-mulch to keep the moisture from being pulled out by the torrid sun." This remark was made to the writer by a young English woman, tending her beautiful rose-garden, lately established in the Golden State. How she missed the rains and fogs of England!

As a native Californian, free of that climate complex so noticeable in our adopted citizens, I freely admit her contention that continual sunshine does have its disadvantages. However, it is just as well we have a few problems, such as everlasting irrigation and persistent mildew, for to solve them adds so much to the joys of accomplishment. Rose-growing would not be the delightful adventure it is if everything about it was easy!

Our long, dry summers begin in May, with scarcely a trace of moisture until November, so it becomes necessary to give our roses a thorough watering once a week, or every alternate week, depending on the weather. We never sprinkle our roses, but dig a basin about each bush, or a trench down the center of the beds, and let the water slowly trickle from the hose until each plant has had a thorough soaking. The following day the ground is well hoed to form a dust-mulch that will conserve the moisture about the roots. Frequently I am asked for advice regarding a ground-cover for the rose-garden, and I marvel very much that anyone should feel the necessity of such a covering in a region where rose bushes are clothed in leaf and bloom ten months of the year. A ground-cover in a California rose-garden, or any place, in fact, where moisture must be conserved, is just an abomination.

Another mistake often made by our gardeners is trying to keep their roses in bloom continuously, thus wearing them out and unfitting them for producing really fine blooms. It is most important that they have two resting periods during the year — one during August, induced by withholding prac-

tically all water, and the other from mid-December until February.*

The only pest giving us serious trouble is mildew, which starts early in April, brought on, no doubt, by the extremes in temperature common at that season when warm, balmy days are followed by exceedingly chilly nights. Prevention is the only satisfactory method of combating this enemy, and constant vigilance is imperative. We inspect the roses every morning, particularly the young foliage, on which mildew usually starts, and dust with sulphur or spray with Fungtrogen at the least showing. I prefer the latter remedy, as it leaves no unsightly residue on the leaves. Some roses are very susceptible to this mildew and must be discarded in favor of resistant varieties.

Protected by low ranges of mountains from the drenching fogs of the Pacific, and carpeted with rich alluvial soils of clay and adobe, these inland valleys of Santa Clara, Sonoma, Napa, and Sacramento have rose-growing conditions just about perfect. Here, any rose will thrive if properly planted and given a reasonable amount of care. To avoid mistakes and consequent disappointment, it is well to supervise personally the setting out of roses and to beware of too deep planting. I had an interesting experience with Séverine, a beautiful Pernetiana, planted as per catalogue instructions, with the bud-union covered with 3 inches of soil. It proved a very weak grower and shy bloomer. Finally I replanted it, leaving the bud-union out of the ground, exposed to sun and air, and its subsequent luxuriant growth and wealth of bloom were all that could be desired. Since this experience, all of my roses (some three hundred odd) are planted with the bud exposed, and they grow with a wild abandon that is difficult to curb, even with severe pruning.

Pioneering seems to be the natural heritage of the native Californian, so it is not surprising that our rose-lovers are keen to adventure with the newer roses. Many of these are so superior in form, fragrance, foliage, and color to the old varieties that they should find a home in every garden. In the pink shades are Dame Edith Helen, Rapture, Florex, Shot Silk, Briarcliff and

*Note how this differs from Mr. White's experience in southern California, stated in his article beginning on page 150 and Capt. Thomas' recommendations concerning Tea roses, page 135.—EDITOR.

Rose Hill. Among the more vivid flame-colored roses we have Cuba, Duchess of York, Angèle Pernet and Wilhelm Kordes, all of which are vigorous growers and profuse bloomers. A few of the new yellow varieties particularly worthy are Feu Joseph Looymans, Lady Margaret Stewart, Sunstar, Rev. F. Page-Roberts, and Julien Potin.

Many Hybrid Tea climbers delight in this region and are quite free from mildew. First in beauty is Climbing Louise Catherine Breslau, a soft salmon-pink with blooms 6 inches or more in diameter, often covering the whole plant. It makes a splendid pillar rose, as does Climbing Mme. Edouard Herriot, which blooms much more profusely than the bush variety. Climbing forms of Sunburst, Los Angeles, Hoosier Beauty, and Hadley are equally satisfactory and give blooms from April until late December.

Some of the remarkable old climbers that grow with such astonishing vigor in this section of California are the Banksias, which reach the tops of the tallest trees, literally covering them with snow-banks of bloom; and that glorious old Noisette, Beauty of Glazenwood (Fortune's Double Yellow), with its mass of yellow and copper-shaded flowers, thrives in the sunshine of these inland valleys, though it is most unhappy in the fog-belt. In San José I have seen it smothering a huge oak with richly tinted blooms—a lovely and unforgettable sight.

Rose-Planting in Santa Clara County

By MRS. FREMONT OLDER
President of the Santa Clara County Rose Society

TWO days after Christmas, on a ranch at an elevation of 800 feet, in the western foothills of Santa Clara County, California, I see, at my right, ten blossoms of a Climbing Mme. Edouard Herriot on the pergola. On the rose-arches below are many climbing Cécile Brunner flowers. In front of the house, creamy Lamarque blooms snuggle among tall lavender and purple heliotrope bushes, untouched, as yet, by the frost. On the rose-terraces on the lower side of the driveway are dozens of Lady Hillingdon, Golden Emblem, Maman Cochet K. of K., General MacArthur, Mrs. Aaron Ward and Frau Kar

Druschki, all soon, alas, to be decapitated by the winter pruner. Is it strange that we have as a county slogan, "Make Santa Clara County the Rose-Garden of the World"? The prize roses at the Panama-Pacific Exposition were grown in the southern part of the county. Annually, millions of bushes are shipped east from Santa Clara County; quite naturally, therefore, we think in terms of roses.

When, fifteen years ago, I came from San Francisco to live on this ranch, and to lay out a garden, I knew nothing about the culture of roses, except that I loved them and all flowers, even red geraniums. I was flower-hungry, but I had no one to advise which varieties to buy. So I threw myself on the mercy of a local nursery catalogue. I was so fascinated by the descriptions that I bought one each of the nearly two hundred varieties listed. I thought I had a rose-garden! I was only beginning to learn my rose alphabet, but I loved and lived in my garden. The most fascinating book was a rose catalogue.

One of the most enchanting and haunting memories of my life was a long-gone rose carnival in Santa Barbara in its village days, before it became a fashionable resort. I never forgot the "Battle of Roses." Four years ago I thought Santa Clara County should have a rose carnival, wherefore, in January, I talked about it with the manager of the Chamber of Commerce in the city of San José, 12 miles distant. San José was the first civic settlement established by the Spanish Government. "El Pueblo," as it was called by Spanish Californians, was founded in 1777 by the Spanish Government, and so it had an excellent background for a picturesque community gathering. Requested to write a plan for the festival, I did so, but the decision was that it was too late in the season to raise funds for a spring festival. It was undertaken the following year, and christened by the Secretary-Manager, "La Fiesta de las Rosas."

The Santa Clara County Flower Lovers' Club coöperated with the Executive Committee of La Fiesta de las Rosas. From the Flower Lovers' Club came Mrs. Charles C. Derby, now State Vice-President of the American Rose Society. Mrs. Derby knows so much about roses and all flowers that, at times, she makes me dizzy! For thoroughness, tirelessness, dependability, enthusiasm, resourcefulness, and executive ability, I have never

seen Mrs. Derby's superior. Soon after the plans for La Fiesta de las Rosas were under way, Mrs. Derby suggested that we have a Rose-Planting Day in December, to help supply roses for the May Fiesta. President Horace G. Keesling, of the Santa Clara County Flower Lovers' Club, was most enthusiastic. We had a wonderful committee of workers. We spoke before clubs and schools, bought roses ourselves, and asked others to give them. The city school superintendents and the county school superintendent asked the schools to hold exercises on Rose-Planting Day and to plant roses. Many children brought roses to school with them. The large boys dug the holes. When Rose-Planting Day came, even the remote mountain schools had been visited and given two rose plants by our Committee.

We have had four Rose-Planting Days in Santa Clara County. The second year, the San José Chamber of Commerce contributed enough bushes of Ragged Robin, Gruss an Teplitz, and Paul's Scarlet Climber to plant the parking spaces for several blocks on the highway at the entrance to San José from Oakland. Members of the Santa Clara County Flower Lovers' Club did the work. We chose hardy red roses because our aim is to make this a red rose county.

During the past two years we have planted mostly Paul's Scarlet Climber, that flaming super-rose! It thrives wonderfully. Several gardeners at large country places rooted cuttings for us. At the request of our Committee, many oil companies planted them at their service stations. Our Committee, this year, distributed bushes to most of the service stations.

Our plan, next year, is to complete distribution of Paul's Scarlet Climber bushes to all service stations, and to give, if possible, a Paul's Scarlet Climber bush to each ranch-house between Palo Alto, the California home of President Hoover, and San José. We intend later to cover the county in our rose distribution, as the members of our Committee give their time and motor-cars for the work. We wish especially to see letter-boxes and bridges planted. Some excellent work has already been done in this direction in the Moreland School District.

Recently we have been fortunate in interesting ex-Senator James D. Phelan, who has a wonderful garden and country place near Saratoga. He asked his head-gardener to root for us,

free of charge, all the Paul's Scarlet Climber cuttings we bring him. At the same time, he volunteered $100 to help defray the expenses of Rose-Planting Day.

Another impetus to county interest in rose-culture is the Santa Clara County Rose Society, organized one year ago by Mrs. Derby. It has since had one rose show and several rose pilgrimages. There is a monthly meeting, with a well-informed speaker. A few weeks ago, representatives of the Santa Clara County Flower Lovers' Club and the Rose Society appeared before the San José City Council and obtained the grant of at least two acres of a new park to be made next year, in order to begin a municipal rose-garden. Our clubs have promised to supply the roses. Thus, for the next few years we shall all be busy, very busy, even for rose-lovers!

Roses by the Golden Gate

By VICTOR REITER, San Francisco

THERE has been much said about the glorious California rose conditions, but those conditions do not apply to the coastal region at the end of the San Mateo peninsula, namely the city of San Francisco. Ordinarily, the summer heat in California causes a summer droop in the rose-garden, but not so in San Francisco. The Encyclopedia Britannica states that, although fuschias grow well all the year round in the open in San Francisco, an overcoat is often necessary in midsummer. When the summer mists (as fog) roll in from the Pacific and wrap the city in a cool blanket, 20 miles away warm sunshine is bathing the California countryside. We have a summer that is super-mild; so mild, in fact, that fruits generally fail to mature, although the winters are short. There is rain only in the winter and spring, but the greatest rose enemy in summer is wet. The heavy mists cause balling and make very double roses fail completely. The plants must be watered in the morning of a sunny day or they lack time to dry off before night. Watering is necessary because there is no rain in summer, yet the fog is continually moistening the foliage. It will be seen that the conditions in this city are unusual, to say the least.

These very conditions which appear so discouraging have,

after all, their advantages. The transition from winter to summer is slow and gives a long, mild, cool spring in which the roses develop to exceptional size and color, resembling, with proper care, fine glass-house products.

The summer being mild and very cool, the plants continue their spring growth throughout the season. If varieties are selected which are not too double, they continue blooming through the summer as in spring, because the growth is there and the only danger is balling from wet.

In the fall we have a cessation of the summer fogs and a slow cooling off of the climate. The same conditions prevail as in spring, except that when rose-diseases have attacked the plants in the moist summer, and no defoliation has taken place, these diseases are carried into the fall, reducing that crop in comparison with the spring crop. The fall bloom has richer color and smaller flowers than that in the spring and tapers along till Christmas. By January 15, the roses are ready for pruning.

In late April they begin blooming again. Because there is no burning sunshine their color is exceptional and the "jazzy" roses are at their best. I believe that, with proper selections, a well-cared-for San Francisco rose-garden is equal to any. The care is the same as it ought to be everywhere, *viz.:*

Hard winter pruning and cleaning up.
Copious allowances of cow-manure.
Black-leaf 40 for aphis.
Massey Dust for black-spot every week.
Light summer pinching back.
Removal of all old flowers immediately.

The best varieties must be discovered by trials in each locality. Even nurserymen have proved unreliable sources of information here. In my limited space I have tried several hundred varieties in the last two years. The results have shown some of the reputed favorites to be total failures, and a number of "dark horses" I have found superb.

A list of my trial-and-error collection may help some disgruntled San Francisco rosarian.

Two common roses that succeed are Climbing Cécile Brunner, which blooms continuously from spring to winter and is never defoliated, and Mme. Alfred Carrière, which blooms continuously in major crops and also carries its foliage throughout the

year. Another common climber is Dorothy Perkins, which is planted everywhere, and is a dismal failure. Let us hope that Paul's Scarlet Climber will soon supplant it.

The following are classified according to our experience:

POLYANTHA ROSES

Good.—Cécile Brunner, Echo, Erna Teschendorff, Frau Dr. Erreth, Greta Kluis, Gruss an Aachen, Lafayette, Marie Pavic, Orléans Rose, and Tip-Top.

Bad.—Miss Edith Cavell, Orange King, and Superba.

Indifferent.—Baby Alan, Eblouissant, Ellen Poulsen, Etoile Luisante, Eugénie Lamesch, Katharina Zeimet, Linette, and Mme. Norbert Levavasseur.

HYBRID TEAS

Good.—Admiral Ward, Agrippina, Angèle Pernet, Antoine Rivoire, Betty Uprichard, Christine, Cheerful, Cuba, Diadem, Dorothy Page-Roberts, Eldorado, Elvira Aramayo, Florence L. Izzard, General MacArthur, Golden Emblem, Honeymoon, Hortulanus Budde, Independence Day, Isobel, Juliet, K. of K., Lieut. Chauré, Louise Catherine Breslau, Lulu, Mme. Edouard Herriot, Mme. Butterfly, Mme. Ravary, Miss Amelia Gude, Miss Cynthia Forde, Miss Kate Moulton, Mrs. Ambrose Ricardo, Mrs. Henry Bowles, Mrs. E. P. Thom, Mrs. S. K. Rindge, Margaret McGredy, Marion Cran, Norman Lambert, Old Gold, Ophelia, Padre, Papa Gontier, Premier, President Chérioux, President Wilson, The Queen Alexandra Rose, Radiance, Red Radiance, Red Cross, Rev. F. Page-Roberts, Reims, Richmond, Robin Hood, Shot Silk, Sunstar, Souvenir de George Beckwith, Ville de Paris, Laurent Carle, Wilhelm Kordes, and William F. Dreer.

Bad.—America, Aspirant Marcel Rouyer, Bessie Brown, Cleveland, Dean Hole, Double White Killarney, Duchesse de Brabant, Duchess of Wellington, Edel, Etoile de France, Fragrant Bouquet, Francis Scott Key, General-Superior Arnold Janssen, Harry Kirk, J. C. N. Forestier, Jonkheer J. L. Mock, Jos. Hill, Kaiserin Auguste Viktoria, La France, Lady Ashtown, Lady Pirrie, Lady Ursula, Martha Drew, Miss Willmott, Miss Alice de Rothschild, Mme. Abel Chatenay, Mme. Poincaré, Modesty, Mrs. Aaron Ward, Mrs. Charles Lamplough, Niles Cochet, Silver Columbia, Souvenir de Claudius Pernet, Souvenir de H. A. Verschuren, Sunburst, William R. Smith, and Willowmere.

Indifferent.—Autumn Tints, Belle Cuivrée, Capitaine Georges Dessirier, Chateau de Clos Vougeot, Columbia, Constance, Crusader, Dame Edith Helen, Dr. Joseph Drew, Earl Haig, Edith Part, Edward Mawley, Feu Joseph Looymans, Georges Clemenceau, Golden Ophelia, Gruss an Teplitz, Hadley, Henrietta, Hoosier Beauty, Irish Elegance, Königin Carola, Lady Alice Stanley, Los Angeles, Lyon Rose, Marie Adelaide, Marquise de Sinéty, Miss C. E. van Rossem, Miss Lolita Armour, Mme. Alexandre Dreux, Mme. Caroline Testout, Mme. Léon Pain, Mme. Mélanie Soupert, Mrs. A. R. Waddell, Mrs. Beckwith, Mrs. Charles E. Russell, Mrs. Farmer, Mrs. George Massett, Mrs. Wakefield Christie-Miller, Mrs. Wemyss Quin, Odette Foussier, Queen of Fragrance, Rayon d'Or, Rose Marie, Sensation, Soleil d'Or, Vesuvius, and Victor Waddilove.

The requirements of good roses here are: Freedom from fungous diseases; stiff necks (against wet weather); semi-double blooms, with crisp petals (for fog); continuous growth and blooming qualities; brilliant shades (not faded by sun).

Experiences from Petaluma

By MRS. MAUD E. SCRUTTON, Petaluma

I HAVE tried Rugosa roses here and have had to take them out, as watering makes them rust badly, and the other plants have to have water. But Father Hugo's rose (*Rosa hugonis*) does beautifully and my bordering shrubbery is dominated by lilacs and roses, many of them species. What health and fun I have had, and what I have learned!—and what I still have to learn!

Miss Edith Cavell is a beautiful rose to me, with good color, good growth, and always blooming. Else Poulsen, too, is lovely in habit, color, and blooming. So many women admire a rose plant if it boasts a good flower, regardless of foliage and habit, that I wonder if a referendum of amateurs is worth much? I wouldn't gather and bring roses indoors for house decoration, no matter how beautiful, if they had mildewed foliage. I should not consider it fair to the rose! But a friend who is something of a rose-grower does it, so that ought to make one doubt the vote, oughtn't it?

Roses in Northern California

By HOWARD BISHOP, Jr., Fort Bragg

I GROW roses merely as a hobby. About four years ago I got seven bushes, planted them carefully, and had pretty good results. Then, I got really interested in roses and began to read up about them.

After trying several different methods of planting, I find the following gives best results: Dig a hole 15 inches deep, put in 5 inches of rock and gravel for drainage, then 3 inches of well-rotted cow-manure over the gravel, finishing with 5 inches of good clay and loam. The bushes are planted on top of this and covered to the top of the graft or bud. Many people here use this method and are growing some lovely roses. I have started hundreds of bushes in Fort Bragg and Mendocino County.

After I learned how to deal with the growing conditions here, I acquired 142 varieties one spring, and at the end of the year threw out only 12 which were unsatisfactory—some because of

mildew and others that would not bloom. Last year I got still more, and had only one bad rose, Souvenir de Claudius Pernet, which would not open from the bud.

Roses which fail to do well here are: Souvenir de Claudius Pernet, Meteor, Willowmere, Cleveland, Sensation, Mrs. Lovell Swisher, William C. Egan, and Gruss an Aachen.

The best are Angèle Pernet, Sunstar, Los Angeles, Hortulanus Budde, Wilhelm Kordes, Golden Emblem, Shot Silk, and National Emblem. These eight are outstanding—free from disease and have many blooms. Others that do very well are Westfield Star, Mrs. A. R. Barraclough, Lady Roundway, Florex, Mme. Alexandre Dreux, Mme. Butterfly, Annie Laurie, Padre, Dame Edith Helen, The Queen Alexandra Rose, K. of K., Imperial Potentate, Captain Ronald Clerk, Red Star, Evening Star, and Columbia.

Roses in the Redwood Empire

By MRS. J. H. GAULT
Chairman Garden Section, Eureka Women's Club, Eureka

A GIFTED poet, so fortunate as to have this wonderland of forest and flower for inspiration, might well use this same title for a song. The fame of the redwoods has been heralded far and wide, but little has been written of the flowers that grow where the monarchs once reigned. The soil which grew our big trees, along with a varied climate, will grow almost any flower or shrub. People from Eureka who visited the Rose Carnival at Portland, Ore., last year reported that our roses are as fine as those in the famous rose city. The rose that comes first on our list is the climbing tiny Polyantha, Cécile Brunner, the rose for all occasions and thriving almost anywhere. We find it festooning archways and pergolas, creeping over walls, or clinging to chimneys. Its myriad salmon-pink blossoms make one dream of fairyland. Although at its best in May and June, it blooms some throughout the summer. Lamarque is another climber that thrives well and is weighted down with white blossoms for Decoration Day. American Pillar and Paul's Scarlet Climber have become popular here. In our valley towns, back from the coast, the yellow Banksia is a lovely sight

in the springtime. Beauty of Glazenwood does better, too, in the warmer parts of Humboldt County.

Two climbing roses created a great deal of comment at our Spring Flower Show last year—Cherokee and Ramona. Belle of Portugal is very attractive. Words can hardly describe it. We called it the "Belle of the Hall." Hundreds of people admired the long, waxy pink buds with their perfect green foliage. Its blooming period, unfortunately, is short. The great white blossoms of Frau Karl Druschki seem to vie with the redwoods in size, while Lady Hillingdon rivals our "cups of gold" with its lovely apricot shade.

The following roses all do well here: Hoosier Beauty, General MacArthur, Ophelia, William R. Smith, Columbia, Mme. Caroline Testout, George Dickson, Papa Gontier, Radiance, Constance, Rose Marie, Killarney, White Hadley, K. of K., Irish Elegance, Irish Fireflame, The Bride, Bridesmaid, Golden Emblem, Mrs. Aaron Ward, Los Angeles, Betty, Betty Uprichard, Mme. Edouard Herriot, and numerous others.

Owing to our proximity to the foggy breath of the Pacific Ocean, we are troubled somewhat with mildew. Among the afflicted roses I have noticed are Crimson Rambler, Dorothy Perkins, Frank W. Dunlop, and the pink Killarney. Some other diseases have crept in—not through our fog, but through the exchange of plants—and they will, no doubt, be overcome by many of the good sprays on the market.

Before me, as I write, January 25, is a lovely Daily Mail (Mme. Edouard Herriot) which was gathered from the garden of a friend today, while from my window I can see several buds on Charles Dingee (William R. Smith). We are seldom without a rose all winter long.

Editor's Note.—The northern section of California evidently is a splendid rose-growing country, but it was difficult to obtain information about its possibilities and problems because of our limited membership in that section. Doubtless the Regional Rose Conference now in view for the Pacific coast this summer will bring to light many rose-growers in that district who are now hiding their light under a bushel by not joining the Society. We are grateful to the authors of the three preceding brief articles for their valuable contribution to this rose survey.

Commercial Rose-Growing in California

By EMMET RIXFORD, M.D., San Francisco

A LARGE percentage of own-root and budded roses supplied to the gardens of America are produced in California in open-field culture. Literally millions of plants are grown each year. Many of these rose enterprises are in central California, notably about San Francisco Bay and in the Santa Clara Valley, but more in southern California, the long rainless summer making it possible to time many of the required horticultural operations to comport with convenience by controlling the water of artificial irrigation.

Of own-root plants little need be said. Cuttings are planted in the open in late fall and winter at pruning-time, when well-ripened wood can be obtained; the rows are irrigated and cultivated often enough to keep the plants in vigorous vegetation and, at least in the case of vigorous climbers such as the Wichuraiana hybrids, merchantable plants may be dug in the next autumn. Larger and better plants of bush roses result if they are allowed to grow a second year. Several firms, particularly in southern California, specialize in growing own-root plants.

By far the greater number of rose plants are produced by budding on cuttings of some readily rooting, vigorous stock, planted the previous winter, and harvested late in the second fall or early winter as so-called two-year-old plants.

A number of different understocks are used, Manetti perhaps the most widely and also Ragged Robin (Gloire des Rosomanes), Baltimore Belle, and Odorata, the particular variety brought to America by the late Frank Meyer. Multiflora Japonica is less used, for it seems not to do as well in the heavy soils of California as in the lighter soils of the Atlantic Coast. Although Cochet-Cochet refers to Manetti as a "detestable stock" because, in France, roses budded on it are short-lived, with us it gives vigorous, healthy plants, especially of the Hybrid Perpetuals. Its long dormant season is an advantage in point of hardiness, but a disadvantage when roses from warmer climes are budded upon it, such as most Teas and Hybrid Teas, and yellow Teas are particularly unhappy on Manetti.

Odorata roots readily, and in our latitude has almost no dormant season. In California it can be budded from June to November, or even longer. Perhaps it is for this reason, or because of consanguinity, that the yellow roses, like Souvenir de Claudius Pernet and Maréchal Niel, do well on it.

The process of rose-propagation by budding, while essentially simple, requires many different operations, each of which must be well conducted if No. 1 plants are to be produced.

By No. 1 plants the nursery trade means plants with three or more branches arising at or within 6 inches of the bud; Teas, Hybrid Teas, and Polyanthas, 18 inches or more high; Climbers and Hybrid Perpetuals, 24 inches and upwards.

Cuttings for later budding in field-culture are generally made 8 inches long, of well-ripened wood of this year's growth, preferably of lead-pencil size. To prevent dying back of the end of the cutting to a node, the top is best cut ¼ inch above a node, just as in pruning rose bushes. But that most inexorable law, the law of economics, forbids such nicety of handwork as too expensive, so large producers tie the canes in bundles of 100 or 200 and cut them in 8-inch lengths with a power-saw, entirely disregarding the location of the nodes or buds.

To prevent, as far as possible, the growth of suckers (which by the way, the French, for evident reasons, call "gourmands"), the cuttings are "de-eyed," *i. e.* the "eyes" or buds of the lower 4 to 5 inches of the cuttings are removed, preferably with a narrow knife-blade, very sharp. There is no such thing as a suckerless rose, but some are much less prone to produce suckers than others. Especially objectionable as understocks are the more stoloniferous roses, such as Rugosa, notwithstanding their advantages in other respects. Where the soil is light and digging the plants is relatively inexpensive, some propagators find it worth while to lift their understocks in the fall, then "shave their necks" and replant. But much can be done in the preparation of the cuttings to lessen the tendency of the stock to form suckers. All wounds in woody plants heal by callus formation. If the callus is below ground, roots and suckers spring from it. Therefore, the cuts in the operation of "de-eyeing" should be as small as is consistent with sufficient thoroughness to remove the three dormant eyes at each node.

Some propagators remove all but the uppermost eye of the cutting, but this disregards an important horticultural law; viz., that there is a correspondence between top-growth and root-development—the more top the more roots. Nothing is more difficult in horticulture than to convince an old-time pruner that hard pruning hinders rather than favors root-growth. In "de-eyeing" rose-cuttings, all that is essential is to remove the eyes for a sufficient distance from the bottom of the cutting to furnish clear room for budding. For an 8-inch cutting, a clear space of 4 to 5 inches is sufficient; above this, the more buds the better.

The cuttings should be kept damp until planted, for if the cut lower ends become dry they are apt to die back to the next node above, from which roots may spring if the cutting as a whole does not die, but in any event no proper root-crown is formed. If the ground is not ready for planting, the cuttings may be plunged in bundles of 100 or so in damp sand or even packed in boxes, the lower ends of the cuttings in contact with damp moss. These lower ends will then callus over.

Planting is done in rows 4 feet apart, running north and south, or, perhaps, preferably 20° or so east of north and west of south, so that the buds are inserted in the north side of the cuttings. In districts subject to strong wind during the spring, the buds should be placed on the windward side, since the tender, new shoots are then much less liable to be broken away at the union.

Within the rows the cuttings are placed vertically, and 4 to 6 inches apart. Cuttings of lead-pencil size are stiff enough to be simply pushed into the soft ground. Thinner cuttings will grow quite as well, but require to be dibbled in—another, though small, item of expense. Depending somewhat on facilities for irrigation, character of soil, and the like, cuttings are inserted to a depth of 4 to 6 inches and the soil is tramped or otherwise firmed about them. There is some advantage in delaying planting till the seeds of weeds have sprouted, so that they can be well turned in and destroyed by a final cultivation.

The care of the cuttings after planting may be summed up in the operations of irrigating often enough (three to five times in the season) to keep the plants continuously in vegetation,

and in cultivating after each irrigation to keep the surface of the soil open, so that the nitrifying bacteria of the soil, which are aërobes, can have the needed oxygen as the soil breathes with the diurnal variation of the barometer.

Cultivation discourages the growth of pestiferous weeds between the rows, but only hand-work will eradicate them from between the plants. The worst weed with which the Californian has to deal is wild morning-glory, which, if thick, will seriously stunt the growth of young rose plants.

Budding may be done at any time when the plants are in full vegetation. As in the south of France, budding may be done in April, the tops cut away in June, and merchantable plants may be dug in the fall. But the plants produced by this process are inferior to those budded later and allowed to grow a second year.

The usual process is to begin budding in July, continuing until frost prevents the bark from slipping. This process of budding is described in the 1917 American Rose Annual on page 47, by the late Dr. Huey. When done on a commercial scale, it is greatly speeded up by having a second person follow the budder to do the tying. Four-ply cotton twine is generally used, and is preferable to raffia, for it is more reliable and may be applied more rapidly.

Budding is ordinarily done below the lowest branch and somewhat below the surface of the ground, which necessitates the expensive operation of hoeing away the dirt by hand. In the case of heavy adobe soils, this can be done only at the "psychological moment," when the ground is just moist enough to be friable, for if too wet it sticks to everything and if too dry it requires a pick, almost dynamite, to penetrate it.

In the colder parts of America, garden work is begun in late April or in May, and it is difficult to keep rose plants dormant in nurseries until then. The plants dry up or their branches die and altogether they are weakened.

This has led some distributors to pot their roses, permitting the plants to start and to be marketed in full growth. Sometimes this gives better plants and better blooms the first season, but it puts an added burden on the original producer of the plants, for pot-culture necessitates low budding, i. e., within 3 inches or so of the root-crown, which means that the grower

has to have the dirt dug away from the plants at budding-time, almost to the root-crown. Of course, roots are in this way often exposed, and even if not actually uncovered they are reached by the heat of the sun on the surface of the ground, which tends to cause the roots to send up suckers.

In ideal budding only the bark of the scion is inserted—*i. e.* the bit of wood which is cut along with the eye is lifted out of the bark. From a practical and commercial standpoint, this is expensive and unnecessary and even disadvantageous, for the slip of wood stiffening the bark facilitates introduction of the bud into the slit in the stock, but still the budder who is clever enough to cut the eye from the scion with a slip of wood of minimum thickness has the largest percentage of good unions.

The budded cuttings should not be irrigated for a week or so after the operation, for irrigation water is apt to deposit silt about the bud and interfere with union.

The strings are removed three to six weeks after budding, according to the rate of growth of the plants. They should be removed before they become so tight by swelling of the stem as to crease it.

The tops are cut away when dormant to furnish cuttings for next year's crop of understocks, and after the inserted buds start, the stems are cut back to the bud to permit the callus put forth by the bud to cover over the stems of the root-stock.

Where the new shoot has put forth a few leaves, its tip should be pinched off, to which mutilation the plant protests by sending out two or more additional shoots from the eye or near it, an operation which requires a good deal of moral courage on the part of the grower who loves his plants, but which is necessitated by the exigencies of "the trade."

The rows are gone over several times thereafter to suppress suckers and weeds, irrigated often enough to maintain the plants in constant vegetation, and the ground-surface cultivated after each irrigation.

Better plants are produced if flower-buds are suppressed, but this procedure is too expensive to be practiced commercially.

Mildew is combated by dusting with finely ground sulphur, preferably on a hot day which causes oxidation of the sulphur into SO_2, the fumes being the active fungicide.

Finally, when the plants are dormant in the fall, they are dug, not by hand (for in heavy, sticky soil that is too laborious) but by machinery. A 20-inch U-shaped blade, supported by a suitable carriage, is pulled along or rather under the row by a cable which is wound on a drum, turned by an engine at the end of the row. Where soil is lighter, such a U-shaped plow or digger may be drawn by a tractor, straddling the row. The plants are lifted by hand, trimmed and tied in bundles of ten, labeled and stored in a cellar till ready for shipping.

The plants are packed in tar-paper-lined cases, 500 or 1,000 in each, and shipped in carload lots. Each case bears the local horticultural commissioner's certificate of inspection as to freedom from quarantinable diseases.

Roses are voracious feeders and rapidly exhaust the soil, so that only three or four crops can profitably be taken from the same ground, when it is necessary to give the soil a rest of a year or two. The interval is best employed by growing a crop of clover or some other leguminous plant which should not be harvested but plowed and disked in as green manure to renitrify the soil. Therefore, in calculating the cost of producing rose plants for the market, the rental value of the land should be taken for not less than eight years for three crops.

Mention might be made of a recent innovation in rose-propagation in California which has lately reached considerable proportions—the digging of budded roses the fall after budding, while they are still dormant. These plants, comparable to bench-grafted roses, but better, are suitable for greenhouse culture but may also be reset in the nursery of the distributor, where they make their major growth, to be lifted in the following fall or to be grown in pots. While this method has the advantage of quick turnover for the grower, the price he receives is correspondingly small, and, after all, it is a question whether in the following years the plants are as good as the two-year-old budded plants described above.

I have gone thus into detail concerning the processes by which rose plants are produced on a commercial scale in order that the readers of the Annual may realize the amount of painstaking work which goes into the production of a No. 1 California rose plant.

The Rose-Pilgrim's Progress

By DWIGHT L. ARMSTRONG, Lancaster, Pa.

EDITOR'S NOTE.—In last year's Annual Mr. Armstrong told of "A Beginner's Experience." His account of his work and experiments during the past season indicates that he is far past the "beginner" class now, and is well on the way to become one of those mythical beings called "Rose Experts." We are sorry we do not have room for his comments on the varieties which he grew and had under his observation.

GENERALLY speaking, growing conditions the past year were favorable, except some heavy freezes from the middle to the latter part of April, which took their toll of plants that had been quickened by earlier warm weather. Rainfall was good throughout the growing period, and there was sufficient in August to bring a very fine crop of fall bloom.

During November, 1926, we put out about 300 Hybrid Tea roses and wintered them very successfully. They were mounded up about 8 inches, then covered with straw, while over the beds was stretched a canopy of burlap, with the hope of minimizing the effect of the sun during late winter and early spring. When uncovered, the plants revealed just as much die-back as when the burlap was left off. Actual count showed only three bushes which failed to survive the winter. In the fall of 1927 we again set out about 300 Hybrid Teas and protected them in exactly the same manner, but this time we lost nearly 75 plants. The protection was removed just after the middle of April, during a warm rain, which turned to sleet that night and was followed by a hard freeze. The freeze undoubtedly caused the damage, and would have happened whether the plants were put out in spring or fall. Brown canker did an excellent job on many bushes weakened by the heavy frost, and some of them failed to survive the heavy pruning resorted to in order to get rid of the canker. Such results have led us to believe that any covering which does not afford a free circulation of air, and which may catch and hold the heat of early spring days, does much more harm than good. Our burlap did just these two things, and the result was a quickening rather than a retarding of the plants, and a grisly crop of brown canker which was well-protected and abetted by poor air-circulation.

Before the plants were mounded up in the fall, they were pruned and given a very heavy dose of both Bordeaux mixture and Semesan, hoping that brown-canker damage might be lessened by thoroughly saturating the soil and spraying the wood with good fungicides. If anything, we had more brown canker this spring than we did in 1927 when no such methods were employed. It may be that the frost which weakens or kills parts of the canes has much to do with the prevalence of brown canker, and that no amount of external sterilization can eradicate it. We went to great pains to make sure that our plants were wintered under the most favorable conditions, and we were a long way from being free from canker in the spring. No canker appeared later in the season; at least careful examination of our plants has failed to reveal any infections.

With some misgivings, I have read from time to time statements by growers and chemical manufacturers that black-spot could be "controlled" and "prevented." Our roses have always been sprayed or dusted regularly, but black-spot came just the same, and no amount of spraying of the bushes would prevent its unwelcome presence. This year we determined to see if it could be eliminated, and on the chance of having my veracity questioned, I can say that, practically speaking, black-spot was a stranger in our garden, even among our Pernetianas. Four varieties were infected—Mabel Morse, Mme. Jules Bouché, American Pillar, and J. B. Clark. The last has a good excuse.

Our spraying routine this year differed in only one respect—we sprayed the *ground* thoroughly, and paid more attention to making sure that all the ground was covered than we did to seeing that all the foliage was protected. In other words, we worked on the theory of killing the spores at their inception, and our treatment was very successful. In order to check up our method the ground around two fine J. B. Clark bushes was left unsprayed but the foliage was covered regularly twice a week. Black-spot was noticed first late in July on these two plants, and eventually they became badly infected. The other three varieties named had some infection but not enough to defoliate the plants completely or hinder their growth. Our spraying schedule called for a solution of 1 teaspoonful of Semesan to 3 gallons of water, applied on Monday, and a solution of

3 tablespoonfuls of Fungtrogen to the same amount of water, applied on Friday. Semesan is very expensive, but I believe it is a reliable fungicide for roses. The chances are that it would be effective in a much weaker solution, but we wanted to make sure we used it strong enough to do the trick.

One of the most interesting corollaries of the results gained from our spraying was the loss of leaves by the plants, apparently from natural causes. It is my impression that rose foliage, particularly on Hybrid Teas, is not long-lived, and that once a leaf has ceased to serve the plant, it is shed whether it be diseased or healthy.* Hence, I wonder if black-spot under moderate control is such a curse, particularly in the case of Hybrid Teas which make so much foliage.

For a fertilizer we used Springfield Rose Food about the middle of April and middle of July. In the interim the old reliable manure-water furnished the stimulation for good blooms and was put on just before the June burst, and from then on spasmodically as this plant or that seemed to need some help.

About fifty Multiflora seedlings were put out this spring and furnished the basis for "budding practice." Watching an experienced hand budding roses, it looks like an exceedingly simple operation, and, as a matter of fact, the mechanics of it are not complicated. On the other hand, the choice of bud-wood is all important, and here the experienced will succeed and the uninitiated will fail. We learned, through many failures, those fundamentals known to everyone who has tried to bud rose stock—choose buds that have swelled, but not broken; be careful not to injure the bud in stripping the wood; let no dirt get in the cut on the stock; bud on the north side to afford the bud some shade, and if your raffia does not break or disintegrate in two or three weeks' time, cut it off to prevent distortion in the neck of your plant. We use our wild-rose stock to bud some of those varieties which hardly ever do well as "cut-backs," but whose maiden effort is worthy of a little trouble, and above all else to perpetuate those "sports" which nearly always put in an appearance during the growing season. Budding is interesting, and the result when good, well worth the effort.

*See the observations of European growers reported by Mr. Nicolas on page 196. But also see the photographs accompanying Dr. Massey's article, facing page 41.—EDITOR.

Roses in the Puget Sound Country

By DR. HIRAM DE PUY, Tacoma, Washington

WHOEVER has enjoyed a motor trip over that stretch of the Pacific Highway west of the Cascade mountains from northern California across the states of Oregon and Washington and into British Columbia cannot have overlooked the countless thickets of wild rose briars on every hand. In places they invade and overrun the ranchers' pastures and meadows. Following a few years' growth, they offer stubborn resistance to his grub-hook and his stump-puller. The banks of the Willamette, the Columbia, the Puyallup are fringed with these wild roses. Stands 8 to 10 feet high are not infrequent.

Here are to be found roses terrestrial and roses amphibious. Our widespread Nutkana has a predilection for wet places; while the Sweetbriar, or Rubiginosa, prefers the uplands and gravelly prairies. Plants of the former, in marshy places, often have their roots entirely submerged during the winter or rainy season; and, curiously enough, from elevated places they creep down the bluffs to meet the salt-tides of Puget Sound's 1,500 miles of meandering shore, not to die, but to live and thrive—somewhat heterodox to the rosarian's mandate against "wet feet," and with salt added! This old tar is hard to kill, and has its uses. Motoring out of Tacoma over the Mountain Highway which leads to Rainier National Park, for the first 15 miles the tourist encounters thousands of sturdy Sweetbriar clumps. Speeding along these flowery islands of Eglantine, alternated by flashes of second-growth Douglas fir, suggests a rose-film for enduring memory.

One is also drawn to believe that here is a natural home for the rose. Here brambles, first cousins to roses, blackberries, raspberries, and loganberries, thrive as nowhere else, and, like roses, yield with solid substance through a long season.

With such conditions, it required little speculation from pioneer days to the present to declare this section *par excellence* for rose-culture. Our country stems no progress, surely not rose-culture. Here we are lovers of all that bears the name of rose.

We are referring to places along the coast at 47° north and beyond, yet, here in the open ground at mid-winter, January 15, without protection, are gardens filled with every variety of Tea, Hybrid Tea, and Perpetual roses awaiting, with bulging eyes, only the sun-rays of earliest spring. We are not in the selling business. Everybody here loves the rose. It enters into the people's daily lives. The plutocrat and the cottager alike pay homage to the Queen of Flowers. Even our native wildings are not despised; we employ them for standards or tree roses of any fancy variety, and for understock experiments.

Guilty we have been in conniving to bring about morganatic alliances of our wildings with members of the Queen's royal family, and claiming the offspring. We are also, in a modest way, operating our matrimonial rose bureau among Hybrid Teas of standing, with results sufficiently encouraging to carry on. Another season or two for Mendelizing; then our confession! We have captured an escaped wilding raised from Asiatic seeds in our possession whose growth is gigantic, and whose elderberry-sized hips yielded seeds which germinated in sixteen days. We have already roped, broken in, and crossed this fellow with more civilized roses, and are awaiting results.

Our immediate rose-gardens and rodeo are maintained in sections at Tacoma's city parks. Thousands of tourists visit our parks in season. At Point Defiance Park, last summer, more than 5,000 golden yellow Honeymoon and Tacoma rosebuds were presented to visitors. Banquet halls and tourists' trains were decorated with Tacoma roses. No visitor is knowingly neglected. A Rose for every nose and eye, sir!

Before closing, permit me to introduce our very good neighbor to the north, British Columbia. They, too, have our kinds of roses. In contests they play the game square. They, and we, cross the line to judge each other's shows. The keys of their cities and province, and ours are reciprocally granted. We respect each other's laws yet we have jolly good times.

There is, notwithstanding, another form of bootlegging which tempts: to slip a bit of wood or a few eyes of a rare rose across the line for budding purposes. But, as real rosarians have souls and consciences pure as the rose, we desist even in this, and seek a roundabout permit from Uncle Sam.

The American Rose Society Tours Europe

By J. H. NICOLAS, F. R. H. S., West Grove, Pa.
Vice-President, Les Amis des Roses,
Delegate of American Rose Society to European Rose Events of 1928

EDITOR'S NOTE.—The above is the Editor's substitute for Mr. Nicolas' heading, which was the too-modest phrase, "Rose Travelogue." Not previously in its history has the Society been so fortunate as to have such capable attendance upon the many important rose events which show us how vital, extensive, and even official is rose-interest in Europe. Translate the London and Paris occasions to the United States; does ever the "First Lady of the Land" open a rose show? or does the government of New York or Philadelphia participate as in Paris? Mussolini himself recognizes the civic value of the rose it seems.

Very fully is it wished here to acknowledge the greetings sent to the American Rose Society by our sister organizations in Europe, through Mr. Nicolas and the others of our number who attended some of the events with him. It is also only common courtesy to mention (entirely without his knowledge) the appreciation felt for the fine spirit of our Secretary, who permitted his financial interests to be made secondary to the representation of the American Rose Society in an important and dignified manner, and all at not one cent of charge upon the funds of the Society.

I HAD the great privilege of being the official representative of the American Rose Society for three months of participation in the great 1928 European rose year. This journey, involving no expense to the Society, was financed by the rose firm of which its Secretary is President. Much traveling was done to officiate at events not on my business itinerary.

In Europe a rose show is a public festivity, wherefore the first impression an American experiences in attending one of these "fetes" is the recognition given horticulture in general and the rose in particular by the local authorities and the Government of each country, as well as the interest of the people at large. Thus, horticulture is accepted and promoted as a powerful and necessary factor in the happiness of mankind. In Turin, Italy, the Rose Exposition and Jury were presided over by the Secretary of Fine Arts, specially delegated to that duty by Mussolini. In Paris one exposition is inaugurated by the Secretary of Agriculture, and the Jury of Bagatelle is presided over by the Prefet de la Seine, officially representing the President of the Republic, whose special message he read. The

London Rose Show is opened by the Queen of England, and musical entertainment is provided by the band of the King's Highlanders, an honor seldom granted. In Spain, the King annually donates a gold medal to a contest of new roses. In Holland, the Queen sends her greetings; in Belgium, King Albert opens the show. In Germany, the Government sends a representative. At Saverne (Alsace) the Prefet (Governor of the Province) comes to congratulate the laureates, and at Nantes, in France, the Prefet opens the proceedings of the Congress of French Rosarians. The London Rose Conference is welcomed by the Lord Mayor. Everywhere, indeed, "Queen Rose" is given regal status. The general interest of the people is impressive for it makes one feel that the rose is really in the heart of the masses.

THE TURIN EXPOSITION

The Turin (Italy) Exposition, May 20 to 25, included the inauguration of a new public rosarium. I could not attend it, but the Society was adequately represented. When, at the opening proceedings, Count Rossi, the Mussolini representative, called the names of all the national rose societies of the world, two of our French members, Mons. Mallerin and Mons. Gaujard, responded for us. A few days later, at Lyons, they told me of the event. Part of the new rosarium was in an old amphitheatre which at one time had been used for the persecution of the early Christians. Roses now, where once martyrs died for their faith!

Gold Medals were awarded to Milano, a glorious climber of Italian origin, with very large perfumed blooms of salmon-orange; to Marguerite Chambard, a brilliant crimson-red of exhilarating perfume; to Jules Gaujard, a cerise-red Souvenir de Georges Pernet, and to Souvenir de Pierre Guillot, a large rose of coppery orange. As to the rose climate of that region, my informers told me of having seen plants of Mme. Meha Sabatier and General MacArthur 6 feet high, and 3 feet around!

ROSE DAY IN PARIS

The Rose Day of the General Exposition of Horticulture at Paris occurred on June 2. It was sponsored by the Société Nationale d'Horticulture de France, founded in 1646. I served as a member of the Jury. Here is an immense community rose-

garden. The commercial rose-growers in France find it desirable to get together in one big scheme anonymously, thus creating a mass effect on the popular mind. They say it pays!

THE NANTES ROSE CONGRESS

The Congress of the French Rose Society occurred June 6 and 7, in Nantes, western France.

At this Congress, the use of Pernetianas in humid climates was discouraged. It was the consensus of the meeting that spring planting, of which there is yet some in Europe, should be discouraged, and several nurserymen agreed to refuse spring orders. Fall planting is believed to be safe anywhere in cold climates when the tops are cut off and the entire remaining part of the plant is covered with earth. It was emphatically stated that losses from fall planting were not due to cold, but to forced evaporation by wind, which also happens in spring planting.

The session devoted to genetics would have given an indigestion of chromosomes to the layman! At the next session I was called upon to tell of the rose situation in America. I discussed our climatic zones, taking the Congress on an imaginary trip, illustrated on a large wall map, throughout America, starting from West Grove, Pa.

THE BAGATELLE ROSE CONTEST

The great Bagatelle (near Paris) International Contest of New Roses was judged on June 14. Roses have to grow there for two years before any award is made, but the blooms of the first season are given a score, which, added to the second-year score, has an important influence on the total. As usual, the Jury was composed of Government representatives from the Department of Parks, the Department of Fine Arts, the Department of Public Education, together with notable rosarians from nine countries—America, Belgium, England, France, Holland, Ireland, Italy, Luxembourg, Spain—in all about thirty. During the inspection of the seventy-seven roses considered, Mons. Steinbach, superintendent in charge, read the two-years' record of each one, as to number of blooms for each year, persistence of foliage, and resistance to diseases. After the inspection, the Jury went into session in the "Orangerie,"

(built in 1780), under the presidency of the Prefet de la Seine. I was elected Secretary and also served "officier de liaison" between the French- and English-speaking members.

The rules call for one Gold Medal only, but if the winner is a French rose, by courtesy, a Gold Medal is also given to a foreign rose. This year, the winner being an Irish rose, only one medal was awarded. A number of varieties having qualified for the medal, several votes were taken, each juror pleading for his favorite. My favorite was Abol, a beautiful, semi-double, highly scented, white rose, which for two days before the meeting had been the general favorite. Had the Jury met then, it would have been a "walk away," but rain had fallen the early morning of the meeting, and Abol's ermine coat had lost some of its purity. Consequently, Lady Margaret Stewart nosed it out, but by one vote only, yet it received the first Certificate of Merit. The second Certificate was won by Mme. Van de Voorde (C. Mallerin), a magnificent, large, scented, red rose of the type of K. of K., its parent, but much fuller, of vigorous growth, and the Radiance type. One of the best French roses of the lot took the third Certificate—Jules Gaujard (Pernet-Ducher). It is an improved Souvenir de Georges Pernet, but more cerise in color, with greater brilliancy, and apparently a better grower. The fourth Certificate, generally reserved for a "decorative variety," was awarded to Glenn Dale, the posthumous Wichuraiana seedling of Dr. W. Van Fleet disseminated by the American Rose Society. It was really beautiful.

At the ensuing business session of the Jury there was discussion of the fact that each year there are seen varieties known to some of the Jury as of high merit, but making here a poor showing, even the second season. Superintendent Steinbach produced his records, showing that invariably these were spring-planted, thus seldom recovering enough, even the second season, to compete with those planted in the fall. A new rule was then unanimously adopted that hereafter no plant would be accepted for trial at Bagatelle after December 15. American growers who intend to make entries at Bagatelle should take notice!

A motion that no rose be accepted unless the parentage be given, and also that no sport be qualified for the Gold Medal (the latter rule having been passed by the National Rose

Society of England), was defeated after a debate in which Mr. Dickson insisted that "modern roses are the product of several generations of interbred seedlings, mostly unnamed and of varied pedigree. In many cases where parentage is given it is either a guess or a fiction, wherefore the custom of leading British breeders of not naming parents is preferable."

Among the novelties not rewarded, I noticed the following: Edouard Mignot (Sauvageot), a good red, well-formed, highly perfumed, and seemingly vigorous and healthy; Souvenir de Charles Gouverneur (Chambard), a multicolored variety of the Gorgeous type, finally settling to a clear Dresden pink, while, unlike Gorgeous, the plant is very vigorous and bushy, with healthy foliage; Marguerite Chambard (Chambard), probably a late bloomer as it was in bud only at Bagatelle, though as I saw it later in Chambard's fields I believe it to be *the* red rose of the year. It won a Gold Medal at Turin, and again at Saverne. It had shown so well in 1927 (score 8½) that the rules were suspended and the variety was reserved for 1929.

Charles P. Kilham (Beckwith) was a little passé, otherwise it might have clipped the wings of the medal winner, Lady Margaret Stewart. It seems a glorified, more finished, fuller Betty Uprichard, with more handsome foliage. Aphrodite (Easlea) showed as a charming variety, with large, semi-double blooms literally covering the bush. (It is well named, as each bloom seems to be the mother-of-pearl shell out of which, according to tradition, came Aphrodite!) Paloma Falcó (Dot) was not advanced enough for proper judging, and was also reserved for 1929. A few days later I saw it at its best as a "scramble" of rich copper, gold, and salmon, rioting in a large bud of artistic form; the open bloom is very full. Dame Edith Helen (Dickson) seemed a cabbage on an upright stem, partly denuded. Similar depressing reports were met in England and everywhere. Breeze Hill* (Van Fleet; introduced by the American Rose Society) did not get there until the spring of 1927, and was so stunted that it had made but a few inches of growth in two years. (It is such anomalies that justify the foreign slogan that, "*If you cannot plant in the fall, do not plant at all.*")

*As the sponsor of the rose which Dr. Van Fleet believed to be exceedingly fine, the Editor calls attention to his repeated statement that Breeze Hill *must* have growth and age to show what it is.

The presentation at Bagatelle was, as a whole, of better quality than that of 1927–28. The high scores of the preliminary inspection which seem to point toward the contenders for the Gold Medal of 1929 are given below.

French roses: No. 1277 of Mallerin (since named Mrs. Pierre S. duPont), scored 9, with its beautiful, long-pointed bud of deep golden yellow, showing its Austrian Copper ancestry, its long stem for cut-flowers, its rather large, open bloom, of Mme. Butterfly type, and its superb and persistent foliage. No. 1279 of Mallerin, since named Cecile Walter, scored 8½; it had a very long, orange-copper bud, on a strong stem. Souvenir de Pierre Guillot (Marc Guillot) scored 8; it was of a coppery reddish type, between Marie Adelaide and Mme. Edouard Herriot; very pretty in the bud, and opening to semi-double, cactus-form flowers.

To these must be added Marguerite Chambard, carried over from 1928, after scoring 8½ in 1927.

Among the foreign roses, Federico Casas (Dot) scored 8; it is a mixture of copper, orange, and salmon, rather light in petalage but very effective in the bud. Emily Dodd (A. Dickson & Sons) scored 8; creamy yellow, changing to white, large and quite double. Mme. Georges Petit (Ketten) scored 8; brilliant scarlet, overcast vermilion and orange, and therefore quite showy. Paloma Falcó (Dot) carried over from 1928 because it was not yet in full bloom.

Everything being normal, it is probable that some one of these will get the Gold Medal in 1929, though there is always the possibility of a "dark horse."

As soon as the park gates were opened, after the Jury deliberations, great crowds went in to see the winners. For days before the event, the Paris press had kept the people posted on the progress and behavior of the favorites, as for horse races or great sporting events.

The same afternoon, as delegate of the American Rose Society, I lectured before the National Horticultural Society of France. It was the first time, since its foundation in 1646, I was told, that an American had been thus honored—probably, let me admit, because the other visiting American horticulturists could not talk French!

THE SAVERNE FEAST OF ROSES

At Saverne in Alsace, there followed, on June 17, the Annual Feast of Roses and Contest of New Roses. The city of Saverne is built on a plateau, surrounded on all sides by the Vosges Mountains. The climate is mild in summer but severe in winter; the vegetation is luxuriant, the district for centuries being celebrated for its beautiful flora. Saverne is a rose spot famous in Central Europe. That small territory supports a Rose Society of over 3,700 members, and each city of the provinces of Alsace and Lorraine has its Society. A movement has been started to federate them into one large body, which would number over 10,000 members. The representative of the "great American society" was expected as the guest of the day. The Saverne Rose Society was organized thirty years ago by Mons. Louis Walter who has been the moving spirit ever since. He has succeeded in establishing a public Roseraie that is the most cherished possession of the city. Mons. Walter is called by his fellow citizens, "Rosen Walter," and a petition has been made to change the name of Saverne into Saverne-les-Roses.

At Saverne, as at Bagatelle, the new roses entered for the contest must be planted, five of each, outdoors, and judged *on the plant*. All other shows are of cut-flowers, more or less "dressed," and especially grown for the occasion with an art and perfection that few amateurs can ever hope to reach.

There were entered 37 varieties from seven countries. The scale of judging is the one devised some years ago for Portland, under which roses scoring over 90 are entitled to a Gold Medal. The judging started at 8 A.M., and the winners of 1928 follow. Mrs. Pierre S. duPont (Mallerin) scored the maximum, 100 points, by acclamation of the Jury. The group of five plants showed a maze of blooms and buds of the deepest gold. Mons. Walter, who had observed it for two years, remarked "This is the finest yellow rose I have ever seen, and I know many." Later on, a committee of citizens awarded it the 18-inch Silver Cup donated by the Municipal Council for the best seedling of the year. No. 1279 (Mallerin), now named Cecile Walter for the wife of Mons. Louis Walter, is a seedling of Mme. Mélanie Soupert × Mme. Edouard Herriot; it shows a long-pointed bud like Duchess of Wellington, coppery bronze in the bud stage, on

a long, stiff stem; foliage a little small, like Mme. Edouard Herriot. No. 1276 (Mallerin), which was later named Briand, is a Hybrid Perpetual, healthy, vigorous, and very remontant. The immense bloom suggests the peony, and is clear silvery salmon-pink, with a light orange overcast. Director Rubió (Dot), cerise-red, large, and fragrant, with healthy foliage, is a splendid variety. Marguerite Chambard (Chambard) has already been spoken of as seen at Bagatelle. La Maréchale Petain (Sauvageot) is another good red, highly perfumed.

At the City Hall was a regular amateur rose show, a special section being a competition between local rose societies. In the afternoon there was a concert in the Roseraie, and in the evening a banquet, with speeches, the main theme being friendship and best wishes of the rose societies of Alsace-Lorraine to the American Rose Society.

A VISIT TO BARCELONA

In Barcelona, Spain, June 21 and 22, there was no rose show, and I did not expect to have to officiate for the American Rose Society, but my friend Dot had prepared an audience for me, through the Park authorities, to discuss his project of establishing at Barcelona a test-garden and an international new rose contest similar to Bagatelle and Saverne. Accompanied by Señor Rubió, Director of Public Parks, we visited several available places, and I suggested a beautiful spot within the gardens of the Royal Palace. Permission from the King was essential, and to facilitate getting it, I suggested to Director Rubió that he solicit from the King the grant of an annual Gold Medal, which would internationally be known and coveted as "The Grand Prize of the King." I have since been advised by Director Rubió that the King has granted the request and the regulations are being worked out. He hopes that many American novelties will be entered in that contest—a new and important one.*

June 23 and 24 I was in Lyons, France. A movement, started some time ago, has now come to successful conclusion. The naturally scenic land at the junction of the rivers Rhône and Saône is a public park and a site there has been selected for

*See the result of Mr. Nicolas' suggestion reported in "Roses in Other Lands," page 207.

a Rosarium, where all the roses ever produced in the region of Lyons may be shown and preserved. Here the goal is to have eventually international expositions and contests.

THE SUMMER ROSE SHOW AT LONDON

The Summer Rose Show of the National Rose Society, at London, occurred June 20 to 30, and opened with the visit of the Queen. This is a cut-flower show, the blooms being "arranged" and, in many instances, wired so as to hold their heads up, wherefore one is not able to determine whether a bloom is a "hanger" or is naturally borne on a stiff stem as we like to see them in our gardens. As in our great professional shows, this exhibition is as much, or more, a display of growing skill as it is of the hybridizer's art. In order to show the character of the plants, the rules demand that a plant from the open ground be displayed in addition to the minimum of six blooms. These plants are "maidens" from the fields, and as such are not at all representative of what the variety will do in the garden.

The 1928 show was poorer than for several years, and the roses shown were not impressive. Mr. Courtney Page, the Honorable Secretary of the Society, blamed it on the unusual wet and cold spring. But one Gold Medal was awarded, and this to Chaplin's Pink Climber. Its size and habit are similar to Paul's Scarlet Climber, but the color is Neyron-pink, and it has slight fragrance. It was said to be remontant. Pillars of cut blooms had been arranged that were almost natural. As I saw it later at Chaplin's it seemed to be a real acquisition.

Six Certificates of Merit were awarded, as follows: Advocate (Alex. Dickson & Sons), another crimson that is rather thin and small, well scented; not needed. Edith Nellie Perkins (Alex. Dickson & Sons), because of its total lack of scent, should not have been introduced; it was much criticised. The shape and coloring are rather pretty, but not novel; it is cream outside, with apricot-salmon inside. Swansdown (Alex. Dickson & Sons) is a very promising white, the best I have ever seen for exhibition, and the plant (shown on the side) appeared vigorous. It was pure, uniform, ivory-white, but one had to take a long breath to catch any fragrance. If it were richly perfumed, this rose might turn out to be the best white yet.

The center of attraction in the novelty tints was Daily Sketch (B. R. Cant & Sons), the deepest colored Austrian Copper hybrid I have ever seen—Talisman not in it! It showed glowing orange-red to maroon all around, the petals graduating to deep gold at base. The bud is marvelously shaped and colored and opens ragged to only five or six petals and petaloids. Its color is its only attraction, but a powerful one. The name is but tentative, and it may never come on the market because of its scanty petalage. Souvenir of the Old Rose-Gardens (B. R. Cant & Sons) is an awkward name, yet dear to Mrs. Cant's heart, as it commemorates the old place from which they recently moved. It is a very large, exhibition flower of blush-salmon, turning to pink, very sweetly scented, and was selected for the name because of its suggestion of old roses. James Rea (S. McGredy & Son) is another useless pink, except for box exhibition; it has no *raison d'etre.*

In the seedlings not rewarded, I did not see anything I would particularly care for. There were some varieties still new in the nurserymen's exhibit, but past the exhibition novelty stage. Adèle Crofton (Alex. Dickson & Sons) is a good example of Pernetiana bloom on foliage and wood strictly Hybrid Tea; it is cadmium-yellow and orange-scarlet. May Wettern (Alex. Dickson & Sons) is a great improvement on Mrs. W. C. Egan, and if the plant and foliage are healthy, it will make a place for itself. Flamingo (Alex. Dickson & Sons) is an improved Lady Inchiquin, in foliage at least. Daily Mail Scented Rose (Archer) —put this ponderous name on Etoile de Hollande and you have it; of course, plants being absent, vigor could not be judged, though I saw it later in fields where it did not seem to have Etoile's "pep." Princess Elizabeth of Greece (Chaplin Bros.) I had picked as a good one at the 1925 show, and my judgment is confirmed by trials in our own American fields. Here it was one of the best of the novelties, as a great bunch of beautiful orange, with large, if not full blooms on long, stiff stems. Nuntius Pacelli (G. Leenders) was unanimously accepted as the best and most prolific white bedder in years; it had good fragrance. Mme. La Générale Ardouin (Chambard) was much admired in its combination of deep carmine, dark yellow, and orange. Tests at home had shown it to have a vigorous and

healthy plant. Julien Potin (Pernet-Ducher) was disappointing; it is, evidently, not a rose for humid climates. Growers experienced with it say it does not bloom enough in the garden.

LONDON INTERNATIONAL ROSE CONFERENCE

The International Rose Conference convened July 2 in London, England, and continued until July 6. It was well attended by both nurserymen and amateurs. The United States was represented by Messrs. Fred H. Howard, of Los Angeles; Charles H. Totty and L. B. Coddington and son, of New York; Thomas Roland, of Boston; and myself; Germany by Peter Lambert; Holland by Jonkheer J. L. Mock. Other nations were also represented.

The conference was inaugurated Sunday afternoon with a reception at the home of Mr. H. R. Darlington, President of the National Rose Society, about twenty miles outside of London. It was a delightful social affair, held in a large formal garden surrounded by an extensive collection of species roses.

The formal sessions were officially opened on Monday morning, with an address of welcome by the Lord Mayor of London. Each subject had its own chairman, no one presiding permanently. The leaders were: Mr. Arthur Osborn, of Kew Gardens, on "Rose Species," a plea for more extensive use of the species rose as shrubs; Dr. C. C. Hurst, of Cambridge University, on "Genetics," a discourse on cytology and chromosomes. (See article by Kathleen B. Blackburn on page 54 of the American Rose Annual for 1927.) President Darlington's address, "The Future of the Rose," was a timely sequence to the two preceding papers. His main theme suggested fewer introductions of the popular strains which have about reached the maximum of their novelty possibilities, and more research into "unexplored lanes." The moral of the address was that we have hardly scratched the surface of the possibilities of rose-breeding. This subject was the most popular topic of the conference, and led to a general discussion.

Just here took place an interesting, if not an amusing incident, when someone suggested that the commercial growers should limit their output to twelve to fifteen varieties sure to succeed anywhere; that the public was tired of buying worthless

varieties. Then Henry Perkins, owner of the large Wood & Ingram nursery, got up with fire in his eye. Ridiculing the preceding speaker, he described the monotony and resulting wane of rose-interest if everybody had to contemplate year after year the same old dozen roses. Such action would be truly a retrograde step, he insisted, for rose progress and the pleasure derived from it depend upon a continuously moving pageant. Also, that much of the disappointment with the novelties referred to could be avoided if the climate of originator's region were studied in comparison with one's own, as it is fair to assume that all novelties are good where they originate, but it is too much to expect them to be good everywhere. The loud and prolonged applause that followed showed the approval of the audience, about 400 strong. The same evening, at a banquet at the Savoy Hotel, Peter Lambert, after a fourteen-year absence, was much lionized. When called upon for a speech, he said: "This afternoon someone suggested to limit the list to twelve varieties. It would be better for the rose if he had said twelve thousand!" There was laughter and applause.

The next topic was "The Future of the Rose as a Decorative Flower." The speaker was George Monro, an important wholesale cut-flower merchant. He first accented the previous speakers' urge toward the use of species for breeding more decorative varieties, and then stated that as to climbers, the trend is for large-flowering kinds, the cluster types being now used only for weeping standards, in England called "Umbrella trees." In the forcing line, suitable novelties are few.

Prof. Ramsbottom, of the British Museum, spoke next, on "Diseases of the Rose." His address was mainly intended for under-glass growers. Mildew seems to be the most bothersome disease considered; little was said of black-spot and less of brown canker, which is considered as accidental and generally non-existent in England. A new light was thrown on those two diseases as "coming from the inside." I found this curious opinion generally prevalent in Europe. Either sulphur or copper mixtures seem to be their panacea.

Three days were used by the Conference in visiting the leading nurseries around London, as far as Colchester, 100 miles away, a fleet of large sight-seeing busses being chartered. To

tell of the famous Kew Gardens would take the whole Annual! I saw there the largest species rose collection in the world, I believe, yet I found only 32 we did not have in West Grove. The newer horticultural varieties are tested here in large, solid beds of each one, and the old sorts in danger of extinction are preserved. But the glory of the day everywhere was American Pillar, just at its best, as trained on various types of support, the most effective being among a group of tall spruces, twining itself into the trees in a natural fashion, unspoiled by man's hand. American Pillar in England has tints I never before suspected. To make sure, I had to hunt the marker and read the name! During one of these excursions, passing along a large and lordly estate, we saw a hedge 4 feet high and perhaps 2 feet wide, running certainly a mile, of the new tall Polyantha, Kirsten Poulsen. It was marvelous to see these myriads of "poppies of Flanders fields" glistening in the sun.

A VISIT TO THE EMPRESS JOSEPHINE'S ROSE-GARDEN

On July 11, I visited Malmaison, about 10 miles out of Paris. A European rose pilgrimage would not be complete without a visit to this historic shrine, really the cradle of the modern rose, as it was from here that the Empress Josephine issued the word —and furnished the funds!—that started rose-breeding on the glorious career leading to the rose of today. Empress Josephine's roseraie, now Government property by gift of a great American rose-lover, Mr. Turk, was restored by Mons. Gravereaux to the same order and design as during Josephine's lifetime, and with a few exceptions the collection is practically complete.

It is interesting to note what roses were in Josephine's garden, to give an idea of the progress made in little over a century. Of the Provins and Gallica roses there were 107 varieties or types; of Centifolia, 27; Moss, 3; Damask, 9; Bengal, 22; Spinosissima (pimpinellifolia) or Scotch Rose, 4; Alba, 8; Fœtida (Lutea), 3; Tea, 1. The species represented were: Pendulina (Alpina), Arvensis, Banksiæ, Palustris (Carolina), Cinnamomea, Clinophylla, Lævigata (Cherokee rose), Moschata (Musk rose), Rubrifolia, Rugosa (red and white), Sempervirens, and Setigera. This, then, was the extent of rose knowledge in 1810 when Josephine planted her garden. At

its restoration, in 1910, a collection of 300 modern varieties was also planted to show the rose-progress of a century.

AT THE ROSERAIE DE L'HAY NEAR PARIS

On July 13, I journeyed with Mr. Totty and Mr. Roland to the Roseraie de l'Hay. This, the greatest rose test-garden of the world, is maintained by the family as a shrine to its founder, Mons. Jules Gravereaux, who passed away in 1916. It is still much as the founder left it, except that the collections are not kept intact, and older varieties are being removed "to make place for newer ones," we were told. The Museum of the Rose here is always interesting; there are filed references, descriptions, historical data, and the like, of nearly 11,000 varieties, and a vast library of works on roses in nearly all languages. The son, Mons. Henri Gravereaux, offered me, for the American Rose Society, the privilege of making a copy of every document in the Museum any time the Society would want to have it. I hope the time may come when the Society can avail itself of this most generous offer, never yet made to anybody else. The elder Gravereaux had spent many years of his life collecting rose documents and material, hoping that some day someone would undertake to write a complete history of the rose.

A membership card of the American Rose Society, when shown to the *concierge* at the gate is good for admission.

THE MEETING OF THE GERMAN ROSE SOCIETY

I spent July 14 and 15 in München-Gladbach, Germany, at the annual meeting and show of the German Rose Society. The whole town was in fete for the occasion, a public holiday having been declared for the "Rosenshau" staged in the new Municipal Rose-Garden, built on the site of an old cemetery. A stiff two-day programme had been arranged, and it kept us, officials and Jury, busy going from one affair to the other during truly hot weather. Fortunately, at frequent intervals a blonde Teuton beauty would pass around ice-cold tankards of a certain golden ambrosia that kept us alive. Watching the exhibitors staging their displays, I noticed that pieces of ice were being put in the containers, and consequently, the flowers kept fairly well. Some came long distances, and it seemed to me that if in such torrid

heat roses could be transported in good condition in Germany, there is no reason why we cannot engineer at least regional garden rose shows in America.

Among novelties, the most admired was Lambert's No. 9652, since then named Druschki Rubra, a Hybrid Perpetual seedling of Frau Karl Druschki with all the plant characters of its parent, but with well-perfumed, crimson-red blooms of Druschki form. It was pronounced one of the best introductions of recent years, and I was glad to see it in the nursery fields later where it seemed to justify its fame.

Owing to their climate, German growers wisely hold on to the Hybrid Perpetuals, which still enjoy, for outdoor planting, as great favor as the Hybrid Teas. Rugosa hybrids also are here very popular, and some breeders who use them have succeeded in "taming the shrew," so that the newer productions are more refined. Two of these, Vaterland in red, and Shwabenland in pink, were displayed by Wilhelm Pfitzer. The late Robert Türke was represented by one of his seedlings (Hybrid Perpetual in all appearance), Hadley × Hugh Dickson, named Frau Robert Türke. It has a large, red, very fragrant bloom. Another novelty, a pink sport of General-Superior Arnold Janssen, seemed good. In all, this was a very creditable exposition, and great credit for its success is due Wilhelm Kordes and Peter Lambert. At the evening banquet, President Vogel of the national society, greeted the American Rose Society with a toast, and Herr Oppenheimer, President of the local society, moved to make our delegate an honorary member of the Gladbach Rose Society.

One of the Sunday evening events was the selection of the year's rose queen. There was a beauty show of twenty young women, from among whom the jury, Messrs. Kordes, Lambert, and myself, were to select the queen and her attendant. We did not have much to say; the popular vote forced our selection, and it was a case of "*Vox populi, vox deorum.*" Then followed a march, everybody carrying a Chinese lantern on a bamboo pole, to escort the newly chosen queen through her domain, the rose-garden. It was extremely hot, and how welcome was the cold ambrosia when we returned to the pavilion! The motive all through is to advertise the rose among the people, and from all appearances it is very effective.

THE ANNUAL HOLLAND ROSE SHOW

On July 21, at The Hague, occurred the annual show of the Holland Rose Society. The show was modest, with but few novelties. Odorata (Van Rossem) is an unfortunate name for America, or anywhere else! It was flesh-pink, quite perfumed, but seems to have weak neck; when I saw it in Van Rossem's fields, it stood better. Fancy (Van Rossem) is a semi-double rose of a very striking coloring between Talisman and Mrs. G. A. Van Rossem, but I fear its behavior outdoors.

There were some Polyanthas: Gloria Mundi (de Reuter) is a gorgeous orange-red under glass, but nobody has seen it outdoors. Paris is a red sport of Orléans, and Magnifique showed a large, full pink bloom.

At the banquet following the judging, President Jonkheer J. L. Mock, with whom I had hobnobbed quite a little at Bagatelle and at the London conference, gave a toast to the American Rose Society and charged me to transmit to it, on my return, the best wishes of the Holland Society.

NEW SEEDLING ROSE SHOW IN LONDON

On July 24, the New Seedling Show took me again to London. Like the early show this was not up to the mark. Two Gold Medals were awarded: One to Lord Rossmore (Campbell Hall), which is too much like Miss Willmott and has no perfume; McGredy's Ivory (S. McGredy & Son), cream, with little or no scent, took the other. There was expressed the feeling that neither of these really qualified for a Gold Medal because of the absence of perfume.

Six Certificates were awarded: Baby Betty (Burbage Nurseries), a Polyantha of the small type, which is yellow in the bud, opening light pink. Britannia (Burbage) is another Polyantha of an unnecessary Alice Amos, dwarf American Pillar type. Dr. Hawkesworth (Bees Ltd.) was a deep crimson Hybrid Tea with a very weak neck. George Howarth (Bees Ltd.) seemed a good deep cerise Hybrid Tea. Mrs. Samuel McGredy (S. McGredy & Son) showed the usual McGredy multicoloration; it was small but of good form. Violet Simpson (James Simpson, an amateur) was a pink Hybrid Tea without particular character. Abercorn showed merely as a deeper

colored Queen Alexandra Rose. This show will not go down into history as one of the best, but, nevertheless, eight mediocre roses were given "honors," to put them in already overloaded rose commerce.

MILLIONS OF HYBRID PERPETUALS NEAR PARIS

The last event at which I officiated as representative of the American Rose Society was unexpected. Monsieur Cochet had sent me the request of a cut-rose field-growers' association for the Society to "honor" one of their meetings, and the date arranged was for August 3, at Suisnes, 35 miles out of Paris, the headquarters of the Association of Rose-growers for the markets of Paris. There I saw a most unusual sight—about 750 acres, in patches of from 1 to 5 acres, belonging to some 160 growers, including some millions of plants! These were Hybrid Perpetuals only, and on August 3 they were still cutting large quantities of roses as beautiful and perfect as any grown here under glass, as they had been doing daily since the middle of May. Walking through those fields, I was surprised to see young wood only, and I thought the plants to be maidens —the first year from bud. Asking one of the owners whether these were new plants, he said, to my amazement, "This field was planted by my grandfather thirty years ago, and but very few plants have had to be replaced." He explained that, each year, in the middle of March, the plants were actually mowed off, close to the ground. There then grew many new stems three feet or more long, topped by splendid flowers. These are cut for sale with half or three-quarters of the stems, two eyes below the cuts, promptly sending out again long stems. The varieties used were American Beauty, Baroness Rothschild, Captain Christy, Duchess of Sutherland, Georg Arends, George Dickson, Gloire de Paris, Mrs. John Laing, Vick's Caprice, Henry Nevard, S. M. Gustave V, Mme. Albert Barbier, and a luscious pink produced by one of these growers called Gloire de Lorraine. Surely here was a surprise—and a hint!

Thus ended a most glorious rose pilgrimage, and I can say without undue pride that the American Rose Society is now a little better known overseas!

A few European views on rose culture may be of interest:

SOME FOREIGN ROSE THEORIES

I am here merely "broadcasting" what I have heard without expressing my own opinion or belief, although I feel inclined to subscribe to some of the theories proposed to me by such men as Cochet, Lambert, Prof. Ramsbottom, and others.

Summer defoliation is not always due to disease, although diseases may hasten it. It did not bother our fathers before the introduction of Austrian Brier blood. Austrian Briers will lose their foliage early because it matures early; it is the "nature of the beast," that nothing can change, and all its hybrids inherit that character in a greater or lesser degree. When the foliage is matured, the cortex or bark film that heals the pores where the leaf is attached to the twig begins to form, the leaf receives less and less nutrition from the plant and drops or is really pushed off at the least provocation, spray or dust notwithstanding. Some varieties, when plants are very healthy, will push out new leaves at the top as fast as the bottom ones drop, and the plant consequently retains its activity, but if the defoliation is premature and accelerated by disease faster than new foliage can be produced, the plant goes dormant. Pernetianas are at best in regions of a long vegetative season, like southern France, the birthplace of the race, and this season is divided in two distinct growing periods—an early spring, and a long spring-like autumn, intervened by a hot summer, because there is enough growing weather when they awake from the summer rest enforced by natural defoliation to come again to a useful life. This new growth may mature before winter, if winter there is. The obvious foreign conclusion is that Pernetianas are out of place where the season is short, with late spring and early winter, and in place in a climate with a long growing season.

That black-spot starts from the *inside*, but is induced and spread by *outside* atmospheric conditions, is the theory held by Cochet, who offers in proof the argument that black-spot always attacks the older leaves as they mature, while if it did start from outside it would attack the soft new foliage, just as mildew does. He claims the moisture inside young foliage is in such rapid circulation that the plant "has no time" to mold even when inoculated, until it slows down in the process of maturity. Black-spot is intimately related to the innate persistence of

foliage, as above related; long-lived foliages, such as pure Teas and species evergreen in their native habitats, are immune. Peter Lambert asked "Have you ever seen black-spot on Bracteata, Sempervirens, Cherokee?" When Pernetiana foliage has reached near maturity and the weather is humid, the moisture inside the leaves is not evaporated fast enough or reabsorbed by the plant, and a fungus forms just as clothes fresh from the aseptic laundry will mold if put away moist.

Further, they say, though black-spot starts inside, the fungus fruits outside through punctures, and infection spreads rapidly to foliage already maturing, thus finding fertile ground for extension, although weather conditions might then be normal for proper evaporation of excess moisture in the leaf tissues. This foliage has to be kept "insulated" by some medium. The European growers do not like dust, prefering copper sprays. Another point brought to me to support this black-spot theory is that true Hybrid Teas do not take the spot until very late, when part of their foliage has naturally matured, which process is much later than on Austrian Brier hybrids. Therefore, where summer is normally sultry, stick to Hybrid Teas!

Cankers are caused by fungi of various identities (see Miss Jenkins' article in the Annual for 1927). Like black-spot, the disease starts from the inside. There is much analogy between the mechanical line of march of both diseases, due to too much moisture in the tissues. Canker is especially active in the autumn, when late growth has been stimulated, and full of sap, meets a check from frost or cold nights. In the spring it is brought about by late frost after the tissues have become full of sap. When the sap is "killed," the inactive moisture becomes "stale" and fungi develop from the inside, but bloom outside and infest other plants or soft parts thereof. Where black-spot is prevalent there is bound to be canker, and the control measure for one gets the other. In Lambert's place I noticed some Wichuraiana climbers infested with brown canker. He said that they have it in years when a late frost occurs.

In the French war cemeteries each grave has two polyanthas planted by the Government, and their brilliant color helps to alleviate the terrific depression which overcomes one at the realization of the brutal wholesale massacre of youthful lives!

Roses in Other Lands

EDITORIAL

MR. NICOLAS' story of his travels in Europe in 1928 shows vividly what an intense interest exists everywhere in the culture and improvement of roses, and our correspondence reveals the enthusiasm and earnest work which is proceeding in other countries.

MEXICO

Mr. V. E. Dillon of Tampico writes:

This year the house I lived in was sold and I had to move to another place. I looked with consternation at my old friends, the roses, uncertain whether to leave them behind or move them to my new garden. I decided to move them, for to abandon such tried and trusty friends would be rank ingratitude, if not treachery. To minimize risks of failure and reduce the sufferings of the plants themselves, for whom I have the tenderest regard, I proceeded as follows:

A week or so before the rose bushes were to be moved, I uncovered some of the roots and severed two or three of them on each vigorous bush. This allowed the bushes to receive plenty of nourishment until the day they were moved and permitted the severed roots to heal, ready to assume the task of feeding the plant as soon as it had been transplanted, while the remaining roots healed in their turn.

I moved my rose bushes without the loss of a single one as a result. In the new garden my roses were soon in fine shape again, and when it came to flowering it was an own-root William R. Smith which proved to be the greatest bloomer of them all. Others, however, also did well.

I must say, however, that, without personal prejudice or preference in the matter, I have found own-root roses to do far better in this climate than the budded ones. Possibly, for semi-tropical and tropical zones some root other than that of Multiflora would prove better for budded roses.

BRAZIL

An exceedingly interesting account of roses in Brazil by Mrs. Paul C. Schilling, of Nova Friburgo, was published in the 1928 Annual. During the past season, Mrs. Schilling sent cuttings of the Brazilian rose, Souvenir de Fausto Cardoso, to Breeze Hill, but they arrived dead. Mrs. Schilling says concerning other Brazilian originations:

I shall try more of the Brazilian originations this year and let you know if any are of unusual interest. Mostly they work along the lines of Marie van Houtte which, while highly successful, is no novelty.

I wish all the rose friends could see the profusion and perfection of my roses at times. A recent American visitor remarked: "Why, I never in all my life have been where I could pick roses in such quantities day after day. At home we

wait for days with bated breath for a single rose to unfold." I encourage all hands to cut with long stems and thus insure frequent pruning.

Do you know the rose Sachsengruss? Here it is huge, with thick texture, semi-double, and just the color of a baby's skin, or a pink geode. It seems to bloom only on the tips of canes or branches, and has no side buds, so that we must wait for new, long canes to get flowers.

The rose Sachsengruss was put out in Germany by Neubert in 1912. Peter Lambert describes it as follows: "Flower very large, pure flesh-color on a white ground, beautifully formed. Druschki shape and growth."

ENGLAND

Mr. Courtney Page, Hon. Secretary of the National Rose Society, sends us the following list of the roses seen at the 1928 shows, with his usual keen comments and notice of their awards. Photographs of the Gold Medal Roses were kindly supplied by Mr. Page and are reproduced facing pages 152 and 153.

NEW ROSES IN ENGLAND

AWARDED GOLD MEDAL:

May Wettern. HT. (A. Dickson & Sons.) A shapely, deep pink rose with recurving petals which show a paler shade. Should be good under glass.

Lord Rossmore. HT. (Dr. J. Campbell Hall.) An immense, full, globular flower, slightly pointed, clear cream, flushed with rose at the point; no perceptible scent. Good, vigorous plant. An exhibition rose.

McGredy's Ivory. HT. (S. McGredy & Son.) A clear, pure ivory or cream color; large, shell-shaped petals, making up a big flower of very fine form; very faintly scented.

Portadown Fragrance. HT. (S. McGredy & Son.) This most deliciously fragrant rose is of very variable coloring and ranges from orange to pink. Awarded Gold Medal and Clay Cup for the best scented rose of the year.

Chaplin's Pink Climber. HW. (Chaplin Bros.) This climbing Hybrid Wichuraiana was splendidly shown, the exhibitor staging six pillars composed of large, handsome clusters of rich, lively pink, each bloom with a small central cluster of golden anthers. Awarded Cory Cup for best climbing rose of the year.

Souvenir of the Old Rose Garden. HT. (B. R. Cant & Sons.) An extraordinary vigorous variety with handsome leafage and very big, broad-petaled flowers of a lovely shade of pink. It is sweetly fragrant, and the only fault we could find was a certain pale streakiness on the outer petals.

J. C. Thornton. HT. (Bees Ltd.) A very shapely, fully double flower of useful, medium size, and the substantial broad petals roll over gracefully. The color is a glowing scarlet-crimson, lightly flushed with maroon in the heart of the flower.

AWARDED CERTIFICATE OF MERIT:

Baby Betty. Poly. (Burbage Nurseries.) The coloring is rather a curiosity, being yellow with a ruddy tint in the buds and changing to clear rose with lighter base with age.

Britannia. Poly. (Burbage Nurseries.) A single crimson flower with white base, perhaps best described as a dwarf Hiawatha.

Advocate. HT. (A. Dickson & Sons.) Handsome, richly scented, crimson rose of fine form, with broad petals, and although not densely double, is of good size.

Portadown. HT. (S. McGredy & Son.) A particularly beautiful rose in form and color, being broad-petaled, and making a lovely and effective bud. The color is clear cherry-crimson; slightly fragrant.

Swansdown. HT. (A. Dickson & Sons.) This is a very clean, ivory-white variety of lovely, broad-petaled form and carrying shapely buds on long stems. Foliage good and dark, slightly fragrant.

Daily Sketch. HT. (B. R. Cant & Sons.) A large, vivid orange variety with gold-shaded base to the broad petals. There are two or three rows of petals and a cluster of deep golden yellow stamens; very fair scent. Foliage dark green.

Miss Nellie Parker. HT. (A. Dickson & Sons.) A rose of pretty imbricated form, and creamy color, with an orange-buff glow that shades up on the outer side of the inner petals; fair scent. Dark foliage.

Dr. Hawksworth. HT. (Bees Ltd.) A rich crimson flower of medium size, good form, and delicious scent. The flowers seem a little weak in the neck, but the abnormal weather may have been responsible for this.

George Howarth. HT. (Bees Ltd.) Flowers medium size, of nice form, and deep cherry-red, a very telling color. A garden rose.

Mrs. Samuel McGredy. HT. (S. McGredy & Son.) Medium-sized flowers of admirable form but no scent. The stand produced a wonderful color effect, the blooms having apricot, yellow, and cherry-red tints in brilliant mixture, and we thought this one of the most promising novelties shown.

Violet Simpson. HT. (J. Simpson.) Very bright cerise flowers, with yellow base to petal, of almost perfect form, and lacking scent only. This was one of the best things staged during the year, and was much admired by Mr. Howard of Los Angeles.

James Rea. HT. (S. McGredy & Son.) A full, well-shaped, clear pink flower of exhibition size; sweetly scented.

Waltham Cross. HT. (Chaplin Bros.) A brilliant, velvety scarlet, single variety that appears to be an improvement on K. of K. It has a little fragrance and promises to be useful for bedding purposes.

Mevrouw G. A. van Rossem. HT. (D. Prior & Son.) A variety of good form and said to have been raised by crossing Souvenir de Claudius Pernet with Gorgeous. It is a showy variety of rich golden yellow color, flushed and lined with peach-pink on the outer petals.

McGredy's Scarlet. HT. (S. McGredy & Son.) For a very short time this variety is true to name, but all too soon the bright scarlet becomes a crimson-maroon. The habit and foliage are good.

Adèle Crofton. HT. (A. Dickson & Sons.) A very sweetly perfumed, golden yellow rose, shaded peach-color. The buds are well-formed, with high-pointed center, but the blooms open rather flat. In habit it is vigorous and free. Foliage dark olive-green and fairly free of mildew. Should be a useful bedding variety.

FRANCE

Mr. Nicolas has covered the situation in France thoroughly in his account of his visit there the past summer.

From Mons. J. Dupeyrat we have received a tribute to the memory of Jules Pernet-Ducher, of Lyons, whose death November 24, 1928, was a calamity in the rose world. M. Dupeyrat's account of Pernet-Ducher and his work begins on page 18.

PLATE XV. Two of Pedro Dot's promising Spanish productions:
His son Mari, and the rose NEVADA

PLATE XVI. John Cook and E. G. Hill on the grounds of Mr. Cook's home near Baltimore, Md.

See page 114 and Rose Notes

GERMANY

Herr Wilhelm J. H. Kordes, of Sparrieshoop, has again given us his critical and detailed report of the new roses, from which, regretting space limitations, we condense the following summary:

Great progress has been made in the keeping quality of colors. We must continue until our roses will keep as well as dahlias and gladiolus.

Concerning new varieties I write as follows: *Desmond Johnston* is a great mixture of gold and scarlet, but disappointing in the open flower. The plant is of moderate growth, and not free from black-spot. *Fascination* is a beauty, with its pink and yellow blooms. *Gruss an Coburg* gives us a large flower in the color of Louise Catherine Breslau, and seems to be a first-rate, well-scented garden [illegible].

Julia, Countess of Dartrey is mostly name, for the flower is a bad, hanging, bluing thing. *Julien Potin* will make its way indoors and out, with its growth and good yellow bloom. *Königin Luise*, from Druschki, is a true Hybrid Tea, paper-white rose for a dry climate, with good plant and foliage. *Mabel Lynas*, a very good grower, varies in color but is sometimes good.

Margaret McGredy has tremendous growth, luxuriant foliage, and a great plant with wonderful, old-fashioned big blooms which, when fresh, are perfectly copper-red. As a garden rose it will be hard to surpass. *Marion Cran* must be worked on standards to appear to best advantage. *Marquise d'Andigné* is not my kind of rose; *Lieutenant Chauré* is better.

Nuntius Pacelli gives us good growth and is a fine white garden rose, standing some rain and having a sweet odor. *Oliver Mee* never opened its large blooms here. *Patience* is very free if you take off the old blooms quickly. The flowers of good substance show a difficult mixture of carmine and copper-red. *Polly* is quite changeable, sometimes a distressing pink, sometimes a good white, with deep orange center. *Rapture* will prove a substitute for Mme. Butterfly. *Lady Sylvia* is not as good as Rapture (we are getting too many Ophelia sports). *Totty's Red* is much like Mrs. F. R. Pierson, but not quite so strong a grower.

August Noack is a dark scarlet sport of Columbia. With the change of color the bud has been altered, too, and has become longer, like Briarcliff. This rose is creating a sensation here, especially as its color is remarkable even indoors. The young foliage and shoots are deep ruby-red. I planted it beside Rose Hill, but we never considered this rose as an improvement on Columbia.

Heinrich Eggers varies from carmine-red to deep orange-pink in the open bloom, in a flower that is full and of good texture, which does best on strong, old plants.

Auguste Kordes is a climbing sport of Lafayette; a very rapid grower, and will bring a good second crop on the well-ripened early shoots. Except for this, the plant looks much like Paul's Scarlet Climber. The color, size of bloom, and the large truss of Lafayette have been preserved in the sport.

Of last year's European sorts, *Charles P. Kilham* is the outstanding color, in deep copper, with sometimes a glow of the best Herriot shade. It shows good forcing qualities here. *Mevrouw G. A. van Rossem* is a deep sun-yellow overlaid and shaded by scarlet. Its faults are that the bloom does not hold color and opens very rapidly. *Marguerite Amidieu du Clos* justifies its long name as a lovely golden rose, the color withstanding the hottest sunshine.

Dr. Edouard Deacon will supersede Mme. Edouard Herriot. *Johannis-zauber* seems so far the best deep crimson, non-bluing bedding rose, resembling

Château de Clos Vougeot, but more fiery. I prefer it to Etoile de Hollande. *Professor Gnau* as a garden rose is a good companion, with its large white blooms heavily scented with old rose perfume.

Johanna Tantau is a most valuable addition to the Polyanthas, producing blooms like the climber, Alberic Barbier, singly and in trusses. *J. F. Müller* is a dark crimson sport of Rödhätte, in color near that of Hadley. The new fancy colored sports of the Orléans type are poor for the garden, though fine indoors. *Orange King, Orange Queen, Goldlachs,* and *Orange Perfection* are in this class.

A good novelty for next year I reckon to be *W. E. Chaplin,* with deep crimson blooms, nearly the color of Lord Charlemont, and of good keeping qualities. The plant has no black-spot.—Wilhelm J. H. Kordes.

ITALY

The Countess Senni, from her rose home near Rome, has long kept us posted on Italian experiences. From her always interesting and frank comments we condense the following:

Charles P. Kilham made the strongest impression among the English roses. *Lady Forteviot* was a beautiful rich golden yellow. *Lady Wakefield* was a lovely orange and coral rose; *Hilda* a fine dark, true pink. *Essence* was a good and fragrant red, and *Mrs. Beatty* a good yellow of the Pernet order; *Diana Cant,* a very rich, deep pink-coral with thin petals, and *Mrs. Tresham Gilbey,* a beautiful soft shell-pink.

Among the new Polyanthas, *Dr. R. S. Kater,* seen in Paris, is a very bright and even red. I should like a whole border of it.

Among last spring's new roses *Mrs. A. R. Barraclough* and *Mrs. Warren G. Harding* were very fine, but this summer's heat almost destroyed them. Mermaid, commended before, has endless vigor. It is over 10 feet high, and is still full of buds.—Mary Senni.

SPAIN

Two years ago we received at Breeze Hill several of Pedro Dot's new seedlings, among which was the beautiful Lí Burés, about which we have been so excited. Among them also was a lovely shrub rose reported to be a hybrid of La Giralda × *Rosa moyesi.* It has large, white single flowers of greatest beauty very early, and similar flowers, tinted with crimson, on and off throughout the season. We told Señor Dot how much we liked it and received the following reply:

I am very pleased of your report concerning my rose, Giralda × *R. moyesi.* This rose, so far, has not yet any name, so I take the pleasure in leaving to your care to put the name that may please you. Enclosed you will find a card with a photo of the rose.

I have had the pleasure of having as guest for a couple of days our friend, Mr. Nicolas.—P. Dot.

The photograph mentioned is reproduced facing page 200, with an insert showing the rose as it appears at Breeze Hill.

The boy in the picture is Pedro Dot's oldest son, Mari, for whom the new Hybrid Tea rose, Mari Dot, was named. We went to some trouble to discover a suitable name for the new rose, and finally hit upon "Nevada" as a short, easily pronounceable name, and suitable because it has an American application, and is a Spanish word meaning "snowy" or a "snowfall." We were glad to receive Señor Dot's approval of the name, and doubtless it will be introduced in due time.

The Editor has just received a communication from Nicolas M. Rubió, Architect-Director of Public Parks of the City of Barcelona and Director of the Pedralbes Royal Gardens, concerning the International Rose Exhibition organized by the Barcelona municipality in the gardens of the Royal Palace of Pedralbes, under the patronage of Her Majesty, the Queen of Spain. Señor Rubió writes:

Every year an International Exhibition of new varieties will take place in Barcelona, in His Majesty's Gardens of Pedralbes. The King will present a Gold Medal for the most interesting new exhibit. The fact that the competition is held in the Mediterranean zone will add to its interest, because the rose trees that obtain a prize will serve as a type for rose-growers in southern countries.

The climate being so temperate, the autumn-flowering will be included.

The following rules have been adopted:

1. The rose trees will be bedded in the park of the Royal Palace of Pedralbes. The Department of Public Parks of Barcelona will take care of the plants. The competition will begin on April 1 and will finish on November 30. Professionals and amateurs will be admitted.

2. Exhibitors must send at least five bushes of each variety presented. It is better for the bushes to be cultivated in pots (for this year only), to which there should be adjoined a notice bearing the name of the variety, that of the exhibitor, and all details interesting to the Judges. Parcels should be addressed to: "Dirección de Parques Públicos, Parque de Monjuich, Barcelona." The Department of Public Parks of Barcelona will pay the duties on foreign rose trees.

3. The Judges will meet twice: the first time for the opening of the competition in the spring, if possible, when Her Majesty, the Queen, is in Barcelona; the second time for the classing date at the end of autumn. The exact dates will be announced later.

4. The Judges will be as follows:

The Lord Mayor of Barcelona; the Assistant Lord Mayor, Administrator of Public Works; Monsieur J. C. N. Forestier, organizer of the Bagatelle Rose Exhibition (Paris); two deputies of the "Fomento Nacional de la Horticultura"; an amateur appointed by the Municipality; six foreign members, deputies from the National Rose Society (England), the American Rose Society (United States) and the Rose Societies of France, Germany, Luxemburg, and Holland; the Architect-Director of Public Parks; an official from the Department of Public Parks.—Secretary.

Every one of these Judges has the right to speak and to vote.

5. During the competition, the Judges will be free to vote, based on the voting scale annexed, which they will put into a sealed envelope and deliver to the Architect-Director of the Public Parks, who will be charged to keep them closed until the final meeting of the Judges. The official remarks on the rose trees will be made known at the last meeting.

6. The prizes to be granted are:

One Gold Medal from His Majesty, The King, which will be granted every year to the best foreign rose presented. This prize will always be accorded. Another Gold Medal from His Majesty, The King, would be accorded to the best Spanish exhibit, if necessary.

One Gold Medal from the City of Barcelona, which will be granted to the rose tree with excellent qualities, in addition to flowering fully during the summer and the autumn.

The Judges may also grant *four Diplomas of Merit.* The Judges will also decide if a rose tree is interesting enough to be exhibited another year.

7. The Municipality of Barcelona will acquire a hundred of the rose trees which have obtained gold medals and fifty of all sorts which have obtained diplomas.

8. The foreign Judges will be entertained for five days at the Municipality's expense.

AUSTRALIA

Regrettably the three successive "favorite dozens" of Australian selection, as supplied us by Mr. George W. Walls, of Melbourne, are crowded out. Mr. Walls kindly sent us some notes from Mr. A. G. DeLacy, Past President of the National Rose Society of Victoria, who discusses the new roses with discrimination and intelligence.

Nearly three years ago, Dr. Tom Guthrie, of Hornsby, New South Wales, visited Breeze Hill, giving us much of interest relating to the rose in Australia and elsewhere. He is now President of the National Rose Society of New South Wales, and from his most interesting presidential address we make the following abstracts:

Practically every phase of rose-growing needs research, especially here in New South Wales, where our conditions are not exactly paralleled in any other part of the world. . . How relatively few are the real, comparative trials reported to the Society! When I speak of comparative trials, I mean genuine scientific tests. Conditions, except the one whose influence is being specially investigated, must be kept uniform. For instance, if you are testing the effect of a fertilizer, see that there are at least two, preferably three tests, without fertilizer, so that the treated roses may be compared with untreated ones of the same variety, similarly planted and developed in the same soil and position. Even then, the observations should be made at various seasons of the year, and for several years, before the comparison is worth much. . . . .

I have specially selected these six points as straightforward simple problems upon which much investigation might be done.

(1) Deep trenching of the soil before planting.

(2) Liming of the soil.

(3) Depth of planting.
(4) Stock for budding.
(5) Application of fertilizer.
(6) Drying off and pruning.

After mentioning the work which might be done in test-gardens properly supported and conducted, he proceeds:

When all is said and done, a test-garden would give us results only for the conditions of the test-garden, and might encourage us to express opinions that were positively damaging to the prestige of the Society when dealing with soil, climate, or treatment of a different character.

This is a very important point, and the application of it should be borne in mind when reading criticisms of roses from any source, whether from a private gardener, a nurseryman or an official test-garden. Mr. Guthrie next discussed his six points:

(1) *Deep Trenching.* When I lived in the Western Suburbs on the clay, I made some trials with regard to the value of deep trenching for roses. . . The results of deep trenching were altogether unfavorable, at any rate at first. . . One of my neighbors went to great expense in trenching practically the whole of his garden, but I am certain that for years his results were inferior to those I obtained on untrenched soil. I was led to believe that, in clay, anything of the nature of air-pockets in the subsoil (such as would be given by deep trenching, and particularly by digging in bulky organic manure) is positively detrimental to the development of the rose. This is also, I believe, the most likely reason for the fact that, as a rule, cow-manure gives better results than stable manure, if dug in, though, of course, the latter makes a good mulch in summer.

Naturally, the observations I made need confirmation, but I assure you I have not been rushed with either supporting results or criticisms.

What I learned in the Western Suburbs is now useless to me, as at Hornsby I am on almost pure sand, where my Western Suburbs results do not apply. I am only sorry that some member did not make corresponding trials in sand ten years ago, so that I might now have the benefit of his experience.

(2) *Liming.* When one comes to try to find any evidence about liming, one appreciates how deplorable the position is. No doubt there are lots of isolated observations, but for anything comprehensive in various soils and the various climates, I search in vain. Almost every statement that is published is a generalized version of results obtained with turnips or beans or grain.

We are generally inclined to assume that lime is required by roses, though, we know well how many plants there are that actually resent its application. Lime certainly neutralizes acidity of the soil, but I am not yet able to say positively whether roses are unable to grow in soil that would be regarded as deficient in lime. I appeal to members to make some trials. These can be done in the tiniest space.

I have made an attempt myself with Sensation (HT.) in various qualities of sandy soil. Even in a sandy position, with bracken growing through the rose bush, and a soil distinctly on the acid side, I have got as satisfactory growth and as good blooms as in the limed parts of the garden. Of course, I supplied mineral fertilizer, but I deliberately avoided lime, by the use of ammonium sulphate and ammonium phosphate instead of superphosphate.

(3) *Depth of Planting.* No phase of rose-growing has been more completely

abandoned to dogmatists than this: still, it is a question that can be definitely decided by proper trials. I say trials (plural) advisedly, for every new stock that is used for budding re-raises the whole question, and one cannot guarantee that different varieties should not have different treatment. The varying results that are obtained by planting the bud at different depths below the surface may more easily be due to differences in the quality of the subsoil, or the drainage, than the depth of planting. If any member will tackle this problem, I recommend him to get the coöperation of one of our nurserymen members now, and to lay out a trial.

You are all familiar with the use of graphs on curve paper. If you are not, I frankly envy you, for it indicates that you have never been in a hospital with a hard-faced nurse "graphing" your temperature or pulse for the doctor's inspection next morning.

I see you all know what I mean. For the tests just mentioned I suggest that you give points for the quality of the growth as ordinates and depth of root for abscissæ. Plot your results and you will have three lines or curves.

If, now, the curves show a similar tendency, you have got evidence of the effect of different depths in planting. If they would cross one another when extended, you may write off your results for the year as a washout. Evidence of this sort is a hundred times more valuable than the confident opinions one often hears, but which may be founded on some prejudice or theory that has not been tested out.

When you have done this for every different stock, every variety of rose, every kind of climate, you will have something really worth while.

(4) *Stocks.* I cannot pretend to have much experience of different stocks, and I imagine that, whatever happens, the main experiments will be made by our professional members. With their help, our rank and file could very easily obtain comparisons that would be a guide for future planting. The prices charged for roses in Australia are so ridiculously low that nurserymen are absolutely driven to using the most convenient stock—not necessarily the one that will produce the best development—for their ordinary business, consequently for special budding or special stocks you will probably have to pay a little extra, but this is well worth doing. Completely different stocks are used in other parts of the world, and no one can pretend that the question has been tested out for all the different classes of roses, for all the varying climates and soils where roses are grown in Australia.

Is it not possible that certain roses which are great favorites in other parts of the world have been disappointing here because we have not used the stock that would give them the best chance of development under our conditions?

(5) *Fertilizers.* One of our most successful exhibitors has asked about the fertilization of his garden, in order that the admittedly wonderful quality of his blooms may be maintained.

In reply I may say that he is just the member, though perhaps not of the rank and file, who can do us valuable service by making a comparative test and reporting the effects of different treatments on his next spring flush of blooms.

Candidly, I do not think there is much wrong with his garden. I do not believe that any garden gets rose-sick, and in reasonably rich soil, with a clay subsoil, fresh nutritive material is being constantly made available by water, weather, and bacterial action. It would be presumption for me to advise him, but I fancy a regular small treatment of cow-manure would probably be adequate for years to come. I should personally be very glad if he would run a belt of unlimed soil through his ground, and would also test the value of potash and of phosphatic artificial manure.

It has often been said that after fifty a man should be his own doctor. A good modification of this is that after ten years a rose-grower should be his own expert adviser. If he has made tests such as I have indicated, he will truly be his own expert.

There is one phase of fertilizer treatment that is of such special interest to our Society that I propose to say a few words on it. That is the question of potash as a deterrent of mildew in roses.

Following on the important paper read by Mr. Harry Hazlewood, we have a large-scale trial at the State Nursery at Campbelltown. The number of plots is so great that all chance of soil-differences is eliminated. The tests are being made with various varieties and over several seasons.

When we do announce the Campbelltown results, it will have a stimulating effect on all investigators, but we must not forget that it will apply only to Campbelltown soil, drainage, and climate, which are different from ours.

Admittedly, Mr. Hazlewood has collected an immense amount of evidence from the most varied sources, which tremendously strengthens his claim, but there are still so many other cases where the results are negative that I am inclined to think that for a complete answer some other factor or factors will have to be recognized.

(6) With regard to No. 6 (drying off and pruning) I speak with diffidence.

Most of the ideas imported from England and broadcast without investigation, twenty or thirty years ago, are the merest nonsense for conditions such as ours. I could turn up statements by self-appointed guides that would turn your hair gray now. These were originally published with so much confidence and authority that a mere member of the rank and file—that is you or I—would have expected to have been eaten without salt if he asked for evidence.

You must pardon me if I become totally unscientific for once, and say that I believe that half the roses grown near Sydney are simply butchered winter after winter for the sake of spring blooms, which are generally destroyed by thrips, whereas a reasonable pruning in autumn would give a fair number of blooms in the off season, when they are most required.

Frankly, I think that all over the world the new variety business is being overdone, and that the ultimate benefit would be greater if, say, one-tenth of the energy spent on crossing varieties were devoted to the more prosaic work of making observations on some of the simple points I have enumerated.

We were delighted to receive a copy of the first Australian Rose Annual issued by the National Rose Society of Victoria in 1928. It is a handsome volume of 130 pages, with 22 pages of advertising in the back, a number of fine black-and-white pictures, and some excellent color-work. It contains articles by many Australian friends whose communications have appeared in the American Rose Annual, notably Harry H. Hazlewood, Alister Clark, Lieut.-Com. G. Prideaux, R. A. N., and T. A. Stewart. It covers the Australian and English Rose Shows, has articles on planting, pruning, bluing of roses, insects, a rose calendar, hints for beginners, and is in every way helpful and inspiring. The American Rose Annual welcomes the Australian Rose Annual into the company of good rose books.

Rose Notes

From THE EDITOR'S CORRESPONDENCE

A Remarkable Druschki.—The photograph of the cluster of Druschki flowers (Plate XVII, facing page 216), was sent to the Editor by J. L. Ludlow, of Winston-Salem, N. C., with the following note. "This is a cluster of Frau Karl Druschki borne on one stem, containing nine flowers and five buds. One of the open flowers and some of the buds are hidden by the foliage and could not be gotten in the photograph any better. The flowers and buds are all perfect in color, size, and form, and made a wonderful display."

Mme. Schumann-Heink Plants a Rose.—Mr. James A. Hays, of Tacoma, Wash., sent us the pleasing picture of the famous diva displaying her interest in roses by planting a rose tree in Point Defiance Municipal Rose-Garden. (See Plate XVIII, facing page 217.) The reflection occurs that none of the great of the world are uninfluenced by the rose.

The Niagara Falls Municipal Rose-Garden.—"A few years ago a prominent citizen, Mr. Hyde, left his entire estate to the city for the purpose of purchasing property for park purposes. The city voted to buy 350 acres of ground for a new municipal park, and the Niagara Falls Garden Club at once proposed a city rose-garden. A committee was appointed to call on the City Manager, who at once gave his hearty approval and coöperation.

"Borrowing the idea used by the Syracuse Rose Society, explained in the 1924 Rose Annual, the Niagara Falls Garden Club agreed to furnish all the climbing roses, and to sell to citizens, clubs, and organizations, beds, or parts of beds, to make up the entire rose-garden, if the city would maintain it, to which the City Manager agreed.

"The Committee of the Garden Club experienced little difficulty in disposing of all the beds. In fact, no one *was urged* to contribute, but *was offered* an opportunity to share in the joy of providing another beauty spot for the enjoyment of its citizens and visitors. Not more then six or eight who were approached refused the opportunity to buy a bed of roses.

"The arrangement of the roses in the beds and the varieties to be planted were left to an experienced rose-grower of Niagara Falls, who selected only varieties which had already proved reliably hardy in that locality and had given most satisfactory results in bloom and vigor.

"So pleased is the City Manager with the results of the efforts of the Garden Club that he has already asked the Committee to make observations during the summer as to the best method for the enlargement of the rose-garden next year. When completed, the Niagara Falls City Rose-Garden will in all probability be the second largest in the state, and may easily attract thousands of additional visitors to view the beauties of Niagara."—E. C. M. Jenss, Niagara Falls, N. Y.

A Texas Municipal Rose-Garden.—From W. O. Bower, Secretary and Treasurer of the Port Arthur Rose Club, of Port Arthur, Texas, comes the plan of a rose-garden in the Lone Star design which he worked out for the municipal rose-garden which is being established there. Mr. Bower writes:

"The Port Arthur Rose Club, composed of thirty-five members, twenty-one of whom are members of the American Rose Society, is sponsoring the planting of a municipal rose-garden located on Lake Shore Drive, a scenic driveway along Sabine Neches Canal.

"There are 154 separate rose-beds, with 5-foot red gravel walks, and 3-foot grass paths leading through the garden. In the center of the plot is located a five-pointed Texas star, in the middle of which is located an illuminated drinking fountain. Arbors are placed at intervals over the gravel walks.

"Such roses as are best adapted to this climate will be used in the main setting, but it is proposed to use many other new roses in trial plots. There are 2,200 roses in the plot, and we have two such plots which are to be developed.

"The Club proposes to plant the plot from proceeds of rose sales. Much interest is being shown by many members and they have no other thought but that the project will end successfully.

"It will take much effort and expense to develop the things we propose, but when completed will give the city of Port Arthur something to be proud of."

Addition to the E. M. Mills Garden.—Dr. G. Griffin Lewis, President of the Syracuse Rose Society, sends a blue print of the extension to the great E. M. Mills Garden which we do not have room to publish. He writes, in part:

"You will note that the extension is somewhat larger than the original garden. It is to be terraced to the lily-pool in the center, and there will be an electric fountain similar to the one in Exposition Park at Los Angeles, which changes color every few seconds.

"They are now filling in and working on this, but it will probably take a couple of years before it is completed."

The Passing of a Great Rosarian.—Dr. Robert Huey, who passed from this life on March 12, 1928, at the age of 85, stood during all his long and useful life as a great rose amateur. To his single-minded zeal is due much of the enthusiasm and interest manifested by many individuals in rose-growing. It was his example and spirit which started Captain George C. Thomas, Jr., on his career of rose investigation, trial and origination.

The Editor of the Annual expressed his gratitude to Dr. Huey at the very beginning of its publication for his cheerful and capable help, when help was hard to obtain. His counsel, his knowledge, his capability, have always been at our disposal. His account of rose propagation by budding, as it may be done by the amateur, was printed and illustrated in the 1917 Annual, and has been most useful.

It was with peculiar gratification to many members of the American Rose Society that one of the most notable climbing roses yet originated, unique in its color and character, was named for Dr. Huey at the meeting of the American Rose Society at the gardens of its originator, Captain Geo. C. Thomas, Jr., in 1919. A portrait of Dr. Huey was shown as Plate XI in the 1922 Annual.

Chicago's Roses.—"An invitation to visit the rose-gardens in Washington and Jackson parks, Chicago, was radiocast during the winter. I made the visit June 24 and found fifteen varieties of roses in Washington and eighteen varieties in Jackson—none of them new or unusual. Shame on Chicago! I also visited the municipal rose-garden at Fort Wayne, Ind., and found it a wonderful garden, worth a write-up in the Annual. Roses were not all labeled, but I listed thirty-two Hybrid Teas, twenty Polyanthas, and ten climbers. It is a splendid display in garden design and in quantity and quality of bloom." —V. C. NICKERSON, Indianapolis, Ind.

John Cook and E. G. Hill.—The Editor hoped to include in this Annual somewhat detailed stories of their lives and works from both these "Grand Old Men of the Rose," but pressure of other matters prevented acquiring the necessary information until too late. Mr. Hill did write us a concise account of his ideals and hopes which will be found as "Roses of the Future" on page 114. Mr. Cook, who celebrated his ninety-fifth birthday in November last, was willing to reminisce for our benefit, but neither the Editor nor his assistant was free to go to Baltimore for that pleasurable event. Nevertheless, we are glad to reproduce a picture (facing page 201) of these two great rosarians together on the lawn of Mr. Cook's home. An account of visits to the homes of both Mr. Cook and Mr. Hill is reported in the 1926 Annual, page 31.

A List of Roses for Southern Florida.—Reported in the Year Book, 1927-28, of the Florida Federation of Garden Clubs by "One who has had years of experience and observation":

BUSH ROSES

Red.—Radiance, Maman Cochet, Etoile de France, General MacArthur, Laurent Carle, Etoile de Hollande, Edward Mawley, Red-Letter Day.

Pink.—Radiance, Mrs. Charles Bell, Maman Cochet, Mme. Lambard, Minnie Francis, Jonkheer J. L. Mock, Mrs. A. R. Waddell, Lady Ursula, Rose Marie, Columbia.

White.—Maman Cochet, Kaiserin Auguste Viktoria, Frau Karl Druschki, The Bride, Helen Good, Mrs. Dudley Cross, Antoine Rivoire, Marie van Houtte, Mrs. Taft, William R. Smith.

The last two are not white and hardly pink, but should be mentioned, as they are two of the finest sorts for Florida.

Yellow.—Lady Hillingdon (highly recommended), Sunburst, Luxembourg, Alexander Hill Gray, Mme. Mélanie Soupert, Mrs. Aaron Ward, Aspirant Marcel Rouyer, Rev. F. Page-Roberts.

CLIMBING ROSES

Red.—Reine Marie Henriette, Climbing Radiance, Souvenir of Wootton, Ramona (Red Cherokee).

Pink.—Climbing Radiance, Maman Cochet, Climbing Killarney, Anemone (Pink Cherokee).

White.—Devoniensis, Maman Cochet, Climbing Kaiserin Auguste Viktoria, Clotilde Soupert, Estella Pradel.

Yellow.—Climbing Lady Hillingdon, Perle des Jardins, Reve d'Or, Maréchal Niel.

Honor for an American.—We are informed that our well-known friend, Mr. J. H. Nicolas, of West Grove, was elected, on January 6, 1929, Vice-President of the French Rose Society, Les Amis des Roses, to serve for three

years. In order to effect Mr. Nicolas' election, it was necessary to amend the constitution of the Society, eliminating the clause against foreign members holding office. This is an indication of the cordial feeling existing between the two societies, and a tribute to Mr. Nicolas' diplomacy in representing the American Rose Society in France the past year, to his high standing as a rosarian, and a compliment to him as a man. The Editor and, we feel sure, the entire membership, congratulate him.

Uncovering Roses in Spring.—Will some informed member write an article in answer to the following? We would be glad to print it. "I would like to see something about the care of roses when they are uncovered in the spring. *This is information I have looked for* as I have been kept guessing as to the proper way to uncover the plants in the spring; so many times, after uncovering them, a cold spell will set in and then it is necessary to give protection again. On the other hand, if roses are kept covered too late the shoots are found to be too long and the consequent exposure kills them, and this, it seems to me, does not do the plants any good. I refer to the exposure to the outside air in this latter condition, not to the weather."—C. R. West, Morley, Colo.

Autumn Cultivation.—"While attending our winter fair and admiring the display of magnificent 'mums,' I met a friend who asked me 'How did your roses bloom this year?' I answered, 'Only fair' (my soil is over a sand area). He asked 'How did your wood ripen this fall?' 'Not very well; it was so mild they kept on growing.' 'Did you keep the ground cultivated and loose?' I said, 'I did to keep the weeds down.' He said, 'You did all wrong. I had quantities of bloom and my wood is well ripened, but I do not work my soil later than September. At that time I tramp the soil hard around the bushes. This checks the growth and causes the buds to mature and the wood to ripen in the fall. I do not trim to two or three buds as you do; I leave five or six and get a mass of bloom and I do not lose any by winter kill.' This was news to me, and I ask you, is it good practice?"—Chester B. Hamilton, Toronto, Ontario, Canada. The Editor replies that success is always a proof of good practice! Obviously, it is much better to have rose-wood matured for winter.

Getting Roses to Bloom Earlier.—The Editor asked Mr. Frank Flett, of Hamilton, Ontario, to tell us how he got roses from his Hybrid Teas in May. He advises:

"This is accomplished by means of a coldframe. The sides of my frames are made out of old fence-boards and are not very ornamental, and the cracks are quite numerous. When frosts come, about the end of October or the beginning of November, the frame is put up. Some time shortly after, the sides are banked up with leaves or manure, the latter if the neighbors do not object. About Christmas, other fence-boards are put over the top of the glass. This keeps the winter sun out and helps maintain a steady temperature. The boards are removed about the end of the first week in March, depending on the weather, making a guess as to whether or not there will be very heavy frosts. A few

degrees will not matter. It would be well at this time to replace the manure, which will be frozen, with some that is fresh and warm. No manure can, of course, be put in the bed. My frames are not ventilated, except through the cracks, during this time, but, no doubt, it would be better if they had been during mild spells. The frames can be taken down and stored about the middle or end of May. One year I had a bloom on April 19, but this was exceptional. Ordinarily you can expect bloom the second or third week in May, three weeks before the roses bloom in the beds not so protected. My small seedlings are wintered in this frame and are on their own roots as they must be to start. Once you remove the boards from over the glass you will have to watch the ventilation as the sun is quite strong in March and April. On clear days the glass should be raised about nine to ten in the morning and closed about four in the afternoon. With small seedlings, black-spot hovers over on the small wood from year to year and is a source of infection more difficult to eradicate than from large plants."

Father Schoener's Difficulties Over.—The Rev. George M. Schoener, who has devoted so many years to breeding roses, was reported to be ill the past winter, and in view of the fact that two of his seedlings, Pittsburgh and Arrillaga, are being formally introduced this spring, the Editor got in touch with him to find out what was happening to his other productions. The following reply was received from Father Schoener:

"I merely want to inform you that just now a long-pending negotiation with the Mission Nursery, Techny, Ill., was completed to the effect that they will undertake marketing my horticultural novelties. I feel it will help greatly to make an end to long-standing misconceptions about my hard work. The Mission Nursery is conducted by the Reverend Fathers of the Divine Word for their foreign missions in China, a worthy cause in itself. They have land right outside of Chicago and the man-power to do the work, which I did not have. This will give me once more a free hand to concentrate my labors exclusively on the production of new things, and send them to their trial-grounds. The Mission Nursery will do the commercial end of it. They will find some suitable location for the propagation of roses around Santa Barbara, or elsewhere in Southern California. What I was able to do in Brooks, I am now able to do once more."

An account of Father Schoener's early work will be found in the 1916 Annual, page 41. There is little doubt that among his hybrids will be found some of great value.

Who Wants to Answer These Questions?—"I have often wished to know who General Jacqueminot was, what Paul Neyron had to do with roses, and whether Captain Christy was a rosarian or just a soldier. We may know something about Admiral Ward on Long Island, for instance, and about Dr. Van Fleet, but who was the Duchesse de Brabant, and why was Maréchal Niel named after that soldier? Why was Rev. F. Page-Roberts honored by having the beautiful rose named for him?

"Do you not think an article, or series of articles in the Annual (or elsewhere for that matter), would add interest and familiarity with roses?"—Wm. Elliott, Columbia, S. C.

Note for Antique Hunters.—In the margin of the "Ladies Companion to the Flower Garden," published in 1843, edited by A. J. Downing, occurs this list of roses growing at that time in Charleston, S. C. Valuable clues as to the names of old roses in that section may be found here. The Editor is indebted to Mrs. Robert Wilson, of Charleston, for lending him the book.

Aggrippina
Apolline
Archduke (Archiduc) Charles
Baronne Prévost
Bougère
Bon Silene
Brennus
Camille Tea (Mme. Camille)
Cloth of Gold
Daily Cabbage
Daily Damask
Daily Pink
Daily White
Devoniensis
Dona Maria
Duchess Isabel
Ducreux
Dupetit Thouars
(La) Duchesse de Morny
Eugène (de) Beauharnais
Général Dubourg
Giant of Battles (Géant des Batailles)
Gloire de Hardy
Gloire des Rosomanes
Lady Hamilton
Louis Philippe
Luxembourg
Lamarque
Le Pactole
Leveson (Leweson) Gower
Mountain Velvet
Microphylla, Red
Microphylla, White
Malmaison (Souv. de la)
Mme. Neumann
Marshall (Maréchal) de Villars
Mrs. Elliot
Princesse Marie
Price of Home
Picayune
Pekin
Pope Pius 9th (Pius IX)
Queen Rose
Sanguinea
Solfatare
Sydonie
Triomphe du Luxembourg
Velvet

In addition to the above named varieties, the following roses are named in a clipping pasted in the front of Mrs. Wilson's book, as also available at the time:

Aimée Vibert
Banksia, Yellow and White
Bouquet de Flore
Carmin d'Yebles
Clara Sylvain
Count du (Compte de) Paris
Couture
Du Roi
Elise Sauvage
Euphrosine
Henri Plantier
Hermosa
Jaune Desprez
King of Rome
Marjolin
Mme. Laffay
Niphetos
Ophirie
Paul Joseph
Prince Albert
Prince Eugène
Pink Moss
Queen of the Bourbons
Roi de Cramoise
Safrano
Triomphe de Bollvillers

Ontario Notes.—One of the Editor's serious regrets this year was the necessity to omit the carefully prepared records of the Ontario Agricultural College on the new roses tested there last year. Mr. Hugh Templin, of Fergus, Ontario, writes concerning the work at the College and other matters:

"The rose-gardens at the Ontario Agricultural College are gradually becoming much better since Paul Sanders took charge of them. As a demonstration garden, they used to be a disgrace, and, two years ago, almost half the bushes had the brier growing up from the roots and nobody seemed to know the difference. Then, Mr. Sanders came from Ottawa and took charge of the roses and irises. He seems to have an unlimited amount of enthusiasm for roses and is able to arouse similar enthusiasm in others around him. Now the beds are much larger and well cared for. This year, many of the new English and Irish varieties were found there, and Merryweather's representative told me a few weeks ago that he had received an order from the Ontario Agricultural Society for three bushes of every new variety listed in their catalogue this fall. Mr. Sanders is now planning a large formal rose-garden which will be one of the finest in Ontario, as well as being the most valuable test-plot in the province.

"This year I attended the rose show of the Ontario Rose Society for the first time. The date was June 29, and the show was very fine, although too early for those of us who are just a little north of Toronto and the lakes. Three large rooms at the King Edward Hotel were pretty well filled, and the attendance

also was good in spite of a pouring rain. I had to drive 70 miles in a bad storm to be there for the last hour, but it was well worth the trouble.

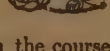
"The best rose in the show was a Lady Alice Stanley, which appears like a strange choice, but it was undoubtedly a very fine bloom.

"For those interested chiefly in the newer roses, the exhibits by the Dale Estate and John H. Dunlop were outstanding. Dunlop had his new rose, Canadian Jubilee, a large pink flower with yellow at the base of the petals. I liked it the best of all the new varieties, but, of course, it was greenhouse grown.

"The Dale Estate had huge bunches of Julien Potin and Lady Canada, the latter their own origination. (Our rose-growers seem to have become exceedingly patriotic lately.) The French rose is very similar to Souvenir de Claudius Pernet except color, which is a trifle warmer. Lady Canada is a huge, shapely rose of a bright pink, but the color is a little too ordinary. A touch of yellow would have helped it immensely.

"My own roses were better this year than at any time during the six or seven seasons I have been growing them. This is partly due to the improved location since I moved last year and partly to the ideal weather conditions (for roses). With diligent applications of Fungtrogen, I was able to keep off all traces of mildew and there was no black-spot until the middle of August, when a holiday and a rainy week interfered with spraying. After this experience, I am a firm believer in Fungtrogen."

Originator of the Noisettes.—The first Noisette rose, as all good rosarians know, was produced in Charleston, S. C., by a horticulturist heretofore known as John Champney. It is pleasant to have the interesting contact with his memory provided by the following letter from Julia R. Tunno, of Atlanta, Ga.: "I would be glad if you will correct the name of my great-great-grandfather which was Champneys, and not Champney. His daughter, Sarah Champneys, was the last of the name, and when she married my great-grandfather William Tunno, the name of Champneys ended. John Champneys was a rice planter, but a great lover of flowers, especially roses, and he had a wonderful flower-garden. In an old family Bible is this record, 'John Champneys, son of John and Sarah Champneys (whose maiden name was Saunders), born December 28th, 1743, in Charleston, S. C., and baptized by Rev. Mr. Gay at Ashley River'; and on another page is this, 'John Champneys died Wednesday, July 26th, 1820.' "



Growing Good Blooms.—In the course of some very pleasant correspondence with Dr. C. H. McLeod, of Lynden, Wash., he gave some valuable hints in regard to growing perfect flowers. Dr. McLeod is a consistent prize-winner in the rose shows and knows his roses. He writes: "You asked me how I treated Willowmere. I treat it like all Pernetiana roses—cut out the old wood with a hack-saw and prune the other canes as little as I can. If you can get this rose or any of the Pernetianas on the brier stock, seedling if possible, you will find that you will have much better growth and greater freedom from trouble. You will not have success with the Pernetiana roses unless you feed them very heavily with liquid manure, and often. Use it very strong, but see that the ground is soaked just before you use it. I feed very heavily, so I do not know how roses grow for others without feeding. Be sure to give your Pernetianas a lot of iron sulphate."

Rose-Protection in the Blizzard Country.—"The article in the 1928 Annual on the blizzard country was great stuff, but the methods of protection advocated for winter need revision. A friend told me he had tried hilling up his plants with 1 foot of dirt and then covering them with straw, and usually lost 95 per cent of the Hybrid Teas, which is true. You see, we have two to 10 feet of snow here, and when it melts and runs through the straw, it wets the roses so that when they are uncovered in the spring they are dead and rotted.

There is one sure way of wintering roses as tender as Lady Hillingdon in Iowa where temperatures range from 35°F. above one day to 25°F. below the next. It is as follows:

Plant roses in rows running east and west. Do not prune in fall except sappy wood. Bind roses all east and peg tops down about 8 inches from ground. Start at least 15 inches on south side of row and dig a ditch one spade deep and one spade wide, throw the dirt on the roses, covering them about 2 inches over all; this must be a *real ditch*, not just a few holes to hold water. Then unroll a roll of tar paper on the south side, the full length of the row, so that all water will shed into the ditch, leaving the north side 2 to 3 inches above the level of the ground to admit air. Hold the paper down with a 2 by 4 scantling on each side of the mound, tied together with a string at each end. Do not uncover until April 10, at least, and then only a little at a time.

Roses are not always in rows, and not all rows run east and west, and it's all a lot of work. You may object. Well, it is better to get them in rows and care for them if you would have good roses in Iowa. The only roses I ever lose are those I uncover too soon. But you know how you feel on a sunny day about March 25!

And one more thing, you *cannot* plant roses here in the fall—not one in twenty will live. Of course, I mean the Hybrid Teas. This is not the mild, moist climate you have in the East, or east of the Mississippi. We have very dry winds sometimes for weeks at a time, bright sun and very cold."—W. W. VOORHEES, Des Moines, Iowa.

Fertilizers for Roses.—Speaking of the benefits received from reading the Annual, O. A. Morhaus of Larchmont, N. Y., writes: "Some years ago, I gleaned from an article that blood, bone, and potash used in the right proportions would be of value as a fertilizer. I have used this mixture with humus, and such roses! They are beautiful beyond description, with healthy stems and foliage, and I have taken practically all first prizes at flower shows since I started to use the mixture. In another article, I learned that heavy applications of fine tobacco dust in the spring would be beneficial. I have used the dust at the rate of 100 lbs. per 100 bushes each year, and rose-bugs are a thing of the past, and black-spot is disappearing. In the 1928 Annual, under 'Unfinished Business,' I found another idea worth trying. If tobacco can be grown to perfection under a cloth, why not roses? Those of us who grow for exhibition ought to try it. I am greatly bothered by the sun fading the delicate color of the new roses, which always happens at exhibition time."

We asked Mr. Morhaus to advise what fertilizers he uses as a source of blood, bone, and potash, and suggested he get in touch with Mr. George Cheney of Vermont, who has grown roses under tobacco cloth. Mr. Morhaus answered further:

"Concerning the blood, bone, and potash mixture, I buy it already mixed

from Vaughan's Seed Store, New York City, at $4.50 per 100 lbs., the ratio being 5-8-7 of nitrogen, phosphate, and potash, in the order named.

"Each year after pruning and when the leaves are well started, I dig in a bountiful quantity of humus (I use 'Alphano' brand). Following this, I give a good double handful of the 5-8-7 mixture to each bush; this is well and thoroughly dug in, at least to a depth of 4 inches. A second application is made about August 15 for the September and fall bloom (but no more humus). Applications of liquid manure are made once each week from the time the beds show color (usually about May 15) until about September 1: the liquid manure is not very strong. At intervals during the season, if the bushes need it, and some always do, I use a handful of Canada hardwood ashes, or perhaps some bone-meal, or maybe both, and once during the season (early) about a cupful of Nova Scotia land plaster (for depth of color). *I never use slaked lime.* The ground is stirred after *every* rain and if there is no rain, then once each week. If it is necessary to water, then *a real soaking* (no sprinkling). All aphis and black-spot are immediately attended to, of course.

"There has come on the market a fertilizer called 'Nitrophoska,' put out by the Synthetic Nitrogen Products Company, New York City. This runs 15 per cent nitrogen, 30 per cent phosphate, and 15 per cent potash. That is rather a strong mixture and a very little ought to go a long way. I am trying it out on a few bushes (using humus with it) and I may have some results to talk about this fall, although I never pass final judgment on a fertilizer or a rose until the end of the third year.

"I am in correspondence with Mr. Cheney of Vermont, regarding growing roses under cloth and think now I will try it over a few this year."

Germinating Rose Seeds.—A novel and effective method of germinating rose seeds is reported by Harry B. Neumeyer of Sandusky, Ohio:

"If seeds are planted outside here, in the fall, they germinate in early April, too early to transplant into the garden because the ground is too cold. Since that method is a failure, I have developed a successful way of handling them. Late in the fall, a hole 12 inches deep, 7 or 8 inches wide, and 6 to 12 inches long is dug, and covered with boards. The following year, about March 1, seeds are planted outside, in sand, in 4 or 6-inch flower pots and allowed to freeze for 2 or 3 nights; then the pots are lowered into the hole and covered with earth. These seeds germinate about the first week in May, and can be transplanted to the garden at that time. I find them as easy to grow as vegetables. After these seeds are planted, they receive the correct germinating temperature, need no water, and do not damp off."

Climbing Hybrid Teas.—It seems to me that rose-growers in Wisconsin and similar climates have overlooked their best bet, in Climbing Hybrid Teas. In my experience here I found them extra-vigorous Hybrid Teas which wintered over much better than the dwarf of the same variety, gave more bloom for the season, and of equal quality. The climbing variety is here much less susceptible to disease than the dwarf, undoubtedly because of more vigorous growth. I believe that the growers and the American Rose Society should experiment in this field and broadcast the results to the people living where similar conditions prevail.—Louis R. Potter, Milwaukee, Wis.

PLATE XVII. Cluster of FRAU KARL DRUSCHKI from the gardens of Col. J. L. Ludlow, Winston-Salem, N. C., May, 1928

Cut was made about two inches from point where last year's cane was pruned, giving three flowering branches bearing nine blooms of normal size (4 to 6 inches across) and five promising buds all on one stem.

PLATE XVIII. Mme. Schumann-Heink planting a memorial Rose Tree in Point Defiance Municipal Rose-Garden, Tacoma .Wash., 1928

On her right, Dr. Hiram de Puy (without overcoat); on her left, James A. Hays (with overcoat),

New Roses of the World

AN EDITORIAL SURVEY

There are 161 new roses included in the present survey, many of them with complete descriptions as published by the originator or introducer. The list also includes the names of the new roses mentioned by our foreign correspondents but not yet in commerce.

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UNITED STATES AND CANADA

GOLD MEDAL ROSE: President Herbert Hoover

**Autumn.* HT. (L. B. Coddington, 1928.) Sensation × Souvenir de Claudius Pernet. Bud medium size, ovoid, burnt orange; flower medium size, double, cupped, lasting, moderately fragrant, burnt orange, streaked with red, borne singly on medium-length stem. Foliage abundant, medium size, leathery, glossy, disease-resistant. Growth moderate, upright; free, continuous bloomer.

Betty. HT. (Stielow Bros., 1928.) Sport of Premier. Bud long-pointed, of perfect form, opens perfectly; flower not as full as Premier (averages 30 petals), brighter than Matchless, winter and summer.

[EDITOR'S NOTE. It is probable that the introducing firm has overlooked the name duplication, and that it will accept our suggestion that the rose be given a name that would not disadvantage it, as would be the case if it assumed the name of a well-known garden rose, grown and sold by most of the nurserymen handling roses.]

**Chicago.* HT. (J. Aldous, Iowa City, Iowa, 1928.) Sport of Premier. Type, Baroness Rothschild. Bud large, globular; flower very large, full, globular, very lasting, intensely fragrant, soft mauve-pink (color Daybreak carnation). Foliage abundant, medium size, rich green, disease-resistant. No thorns. Growth very vigorous, upright (longer stems and stronger than Premier); abundant bloomer for six weeks.

**Dorothy Drowne.* Cl. HW. (Josephine and Walter D. Brownell, Providence, R. I.) Seedling from Sodenia which came up in March, 1924. Type, like parent and Excelsa except as to color. Bud medium size, ovoid, white to rose-pink; flower medium size (1½ to 1¾ in.), very double (75 petals), open, very lasting, white to pink, with pink to crimson and scarlet centers of varying intensity and sizes; red shades in bud increase as season advances and the color lasts until the bloom drops; flowers borne in clusters on long, strong stem. Foliage sufficient, medium size, rich green, glossy, soft, disease-resistant. Few thorns. Vigorous climber (12 to 14 ft.), with normal to moderate number of canes; abundant bloomer (6,000+ blooms in July which last three weeks). Hardy.

**Erie Treasure.* H. Rug. (Chester D. Wedrick; not introduced.) Souvenir de Pierre Leperdreux × Nova Zembla. Type, Nova Zembla, but fuller. Flower large, double, cupped, lasting, intensely fragrant, varying from blush to white, borne singly and several together on medium stem. Foliage sufficient, medium size, dark green, leathery, wrinkled, disease-resistant. Many thorns. Growth vigorous, bushy, spreading to 6 feet; free bloomer (about 100 blooms) in June and intermittently. Hardy.

**Glorious Pernet.* HT. (Myers & Santmann, 1928.) Sport of Souvenir de Claudius Pernet. Bud large, long-pointed; flower large, double, high-centered, very lasting, intensely fragrant, copper with orange center, borne singly on medium-length stem. Foliage sufficient, medium size, dark green, leathery. Growth moderate, bushy; free, continuous bloomer.

**Harriet Neese.* (Harry B. Conyers, 1928.) Ophelia × Harison's Yellow. Type, Mme. Caroline Testout. Bud large, globular, golden yellow at base of petal, brilliant coral blended with the yellow to tip of petal; flower large, semi-double, globular, lasting, slightly fragrant, color of bud intensifies as flower opens and when fully open it takes the Ophelia color on the inside, borne singly or several together on medium-length, strong stem. Foliage sufficient, medium size, rich green, leathery, wrinkled, disease-resistant. Few thorns. Growth moderate, bushy; blooms abundantly in June. Hardy.

Hollywood Beauty. HT. (Pacific Rose Co., 1929.) Sport of Rose Marie. Type, Rose Marie. Bud large, globular; flower large, double, globular, lasting, moderately fragrant, camellia-red, extremely dark, yet cerise, borne singly on long stem. Foliage sufficient. Growth vigorous, upright; abundant bloomer.

**Horden Hall.* HW. (Harry B. Conyers, 1928.) *Rosa wichuraiana* × Frau Karl Druschki. Bud medium size, long-pointed, white with streak of pink; flower large, single, cupped, lasting, slightly fragrant, pure white, with long yellow stamens, borne

*Described by the originator or introducer on the American Rose Society's standard card.

singly or several together on medium-length stem. Foliage abundant, dark green, semi-glossy, thick, mildews slightly in wet season but no blackspot. Growth moderate, climbing; profuse bloomer in June and July. Hardy.

**Miss California.* HT. (John Smith, 1933.) Sport of Dame Edith Helen. Bud very large, long-pointed; flower extremely large, very double, full, high-centered, very lasting, intensely fragrant, brilliant deep glowing pink —one even color, borne singly on long stem. Foliage abundant, large, light green, leathery. Growth bushy; continuous bloomer. Very hardy.

**Mrs. Herbert Hoover.* HT. (L. B. Coddington, 1928.) Ophelia × Hoosier Beauty. Type, Killarney. Bud long-pointed; flower medium size, double, full, very lasting, intensely fragrant, rich, velvety red, borne singly on a medium-length stem. Foliage dark green, leathery, disease-resistant. Growth vigorous, upright (5 ft.); free, continuous bloomer.

**Pasadena.* HT. (D. W. Coolidge, 1927.) Sport of The Queen Alexandra Rose. Bud medium size, globular; flower large, double, full, globular, very lasting, moderately fragrant, golden yellow, edges flame, borne mostly singly on a stem of average length and strength. Foliage abundant, light green, glossy. Growth vigorous, bushy; profuse bloomer.

**Phantasy.* HT. (John Dunlop & Son Ltd., 1927.) Lady Alice Stanley × Royal (or Priscilla). Type, Lady Alice Stanley. Bud large, globular; flower large, double, globular, very lasting, moderately fragrant, perfect medium light pink with yellow base, borne singly on long stem. Foliage abundant, large, leathery. Growth very vigorous; abundant bloomer.

**President Herbert Hoover.* HT. (L. B. Coddington, 1930.) Sensation × Souvenir de Claudius Pernet. Type, Mme. Butterfly. Bud large, long-pointed; flower large, semi-double, open, very lasting, moderately fragrant (spicy), medium orange except for the two outside petals which fade to a lighter shade, borne singly on a long, strong stem. Foliage leathery, disease-resistant. Many thorns. Growth vigorous, upright; free bloomer. Awarded Gold Medal at International Flower Show, New York City, 1929.

Primrose. HW. (Barbier & Co.; intro. by Henry A. Dreer, 1929.) *R. wichuraiana* × Constance. Type, Alberic Barbier but much larger. Bud medium-sized, ovoid; flower medium-sized, very double, full, very lasting, primrose-yellow holding its color until petals drop, borne several together on long stem. Foliage disease-resistant. Growth vigorous, climbing; abundant bloomer. Very hardy.

**Red Beauty.* HT. (John H. Dunlop & Son Ltd., 1928.) Sport of Matchless. Bud very large, long-pointed, red; flower extremely large, semi-double or double, high-centered, very lasting, intensely fragrant, borne singly on long stem. Foliage abundant, normal green, leathery. Growth very vigorous; abundant bloomer.

GREAT BRITAIN AND IRELAND

GOLD MEDAL ROSES: Caledonia, Chaplin's Pink Climber, May Wettern, Mrs. John Bell, Violet Simpson. See Plates XIII and XIV facing pages 152, 153.

**Adèle Crofton.* HT. (Alex Dickson & Sons Ltd., 1928.) Type, Independence Day. Bud medium size, long-pointed; flower medium size, double, full, high-centered, lasting, moderately fragrant, cadmium-yellow overlaid scarlet-orange, borne singly on medium-length, strong stem. Foliage glossy. Growth vigorous, upright, bushy, dwarf; profuse, continuous bloomer from June to October. Certificate of Merit, N. R. S., 1928.

**Advocate.* HT. (Alex. Dickson & Sons Ltd., 1928.) Bud large, long-pointed; flower large, double, full, high-centered, lasting, intensely fragrant, crimson-scarlet, borne singly on medium-length stem. Foliage sufficient, medium size, light green, leathery. Growth vigorous, upright, bushy; abundant, continuous bloomer from June to October. Very hardy. Certificate of Merit, N. R. S., 1928.

**Aphrodite.* HT. (W. Easlea & Sons, 1928.) Hortulanus Budde × Toison d'Or. Type, Isobel. Bud large, long-pointed, rich vermilion; flower very large, semi-double, open, lasting, intensely fragrant, coral-red, shaded gold, borne several together on strong stem. Foliage abundant, large, dark green, rather glossy, mildew-resistant.

Growth vigorous, bushy; abundant, continuous bloomer. Very hardy.

**Caledonia.* HT. (Dobbie & Co. Ltd., 1928.) Bud large, long-pointed; flower large, extremely double, high-centered, very lasting, slightly fragrant, white, borne singly on long, strong stem. Foliage sufficient, large, dark green, leathery, disease-resistant. Few thorns. Vigorous, upright grower; abundant, continuous bloomer. Very hardy. Gold Medal, Scottish National Rose Society, 1928.

**Cherry.* HT. (S. McGredy & Son, 1928.) Bud large, long-pointed; flower extremely large, double, high-centered, very lasting, moderately fragrant, on expanding the inner surfaces turn brilliant carmine-pink flushed yellow, lower half shades from sunflower-yellow to deep yellow at base (color intensifies with age), borne on medium-length stem. Foliage abundant, medium size, light green, leathery, disease-resistant. Few thorns. Growth vigorous, bushy; profuse, continuous bloomer from May to November. Very hardy. Certificate of Merit, N. R. S., 1926; Award of Merit, R. H. S., 1928.

Chaplin's Pink Climber. HW. (Chaplin Bros., 1928.) Paul's Scarlet Climber × American Pillar. Flower large, semi-double, flat, extremely lasting, clear, soft pink, golden stamens, borne in large clusters. Growth vigorous; free bloomer. Certificate of Merit, N. R. S., 1928; Award of Merit, R. H. S., 1928; Gold Medal, N. R. S., 1928.

Colonel Lindbergh. D. Poly. (Old Farm Nurseries, 1928.) Sport of Juliana Rose. Flower very lasting, salmon-orange. Growth vigorous.

**Diana Cant.* HT. (B. R. Cant & Sons Ltd., 1928.) Isobel × unnamed seedling. Type, Isobel. Bud medium size, long-pointed; flower medium size, semi-double, high-centered, very lasting, moderately fragrant, carmine flushed with orange, borne several together on medium-length stem. Foliage normal, medium size, dark green, leathery. Growth vigorous, upright, bushy; abundant, continuous bloomer.

**Edith Nellie Perkins.* HT. (Alex. Dickson & Sons Ltd., 1928.) Bud large, ovoid; flower medium size, double, open, lasting, moderately fragrant, outside of petals orient-red shaded cerise-orange, inside salmon-pink flushed orange, borne singly on long, average-strength stem. Foliage abundant, large, bronzy green, leathery, glossy. Few thorns. Growth vigorous, upright, bushy; profuse, continuous bloomer from June to October. Very hardy. Certificate of Merit, N. R. S., 1928.

Ellesmere. HT. (A. J. and C. Allen, 1927.) Seedling of Ophelia. Flower well formed, moderately fragrant, ivory-white passing to pure white. Foliage mildew-resistant. Few thorns. Growth vigorous; free bloomer.

E. Pemberton Barnes. HT. (J. H. Pemberton, 1928.) Flower large, full, light pink, shaded cerise. Growth vigorous. Suitable for specimen blooms and bedding.

**George Howarth.* HT. (Bees Ltd., 1928.) Gorgeous × The Queen Alexandra Rose. Type, Mme. Caroline Testout. Bud very large, globular; flower very large, extremely double, full, high-centered, globular, lasting, moderately fragrant, bright carmine, borne singly on long stem. Foliage abundant, large, rich green, leathery, glossy. Growth vigorous, upright, bushy; abundant bloomer. Certificate of Merit, N. R. S., 1927.

Iris Patricia Green. HT. (J. H. Pemberton, 1928.) Bud long-pointed; flower moderately fragrant, cherry-red. Foliage dark green. Free, continuous bloomer from June to November.

**Ivanhoe.* HT. (W. Easlea & Sons, 1928.) Type, Lady Maureen Stewart. Bud large, long-pointed; flower large, double, high-centered, lasting, intensely fragrant, brilliant scarlet to rich crimson, borne several together on a medium-length stem. Foliage abundant, glossy. Growth vigorous; free, continuous bloomer. Very hardy.

Ivy Evans. HT. (F. Evans, 1926.) Seedling from George C. Waud × General MacArthur. Flower moderately fragrant, distinct shade of light cerise. Growth vigorous; free bloomer.

**James Gibson.* HT. (S. McGredy & Son, 1928.) Bud large, long-pointed; flower very large to large, double, high-centered, extremely lasting, slightly fragrant, crimson-scarlet with pulsating velvety sheen, borne on medium-length stem. Foliage abundant, medium size, dark green, leathery. Few thorns. Growth vigor-

ous, upright, bushy; very profuse, continuous bloomer from May to November. Very hardy. Certificate of Merit, N. R. S., 1928.

Joan Davis. HT. (A. J. and C. Allen, 1927.) Seedling of Ophelia. Type, Ophelia in growing quality and type of bloom. Flower deliciously fragrant, salmon-apricot sheened cerise-pink on yellow base. Foliage abundant, rich green, mildew-resistant.

Joan Knight. Cl. HT. (John E. Knight & Son, 1928.) Flower well shaped, moderately fragrant, dark red. Growth vigorous; free bloomer.

Lady Bissett. HT. (George Lilley, 1928.) Type, Mme. Edouard Herriot as to color. Flower bright orange, reverse apricot. Free bloomer. Good bedder, best in autumn.

**Margaret Spaull.* HT. (B. R. Cant & Sons, 1928.) Ophelia × unnamed seedling. Bud medium size, long-pointed; flower medium size, double, high-centered, very lasting, moderately fragrant, orange and lilac (variable), borne several together on average-length stem. Foliage sufficient, medium size, dark green, soft. Growth moderate, bushy; profuse continuous bloomer from June to October.

**Marion Horton.* HT. (Bees Ltd., 1928.) Gorgeous × Sunstar. Type, Lady Hillingdon. Bud medium size, long-pointed; flower medium size, semi-double, high-centered, lasting, moderately fragrant, primrose-yellow, borne singly on a long stem. Foliage abundant, bronzy dark green, leathery, glossy. Many thorns. Growth vigorous, upright, dwarf; free, intermittent bloomer. Certificate of Merit, N. R. S., 1927.

Mariposa. D. Poly. (A. J. and C. Allen, 1927.) Type, an improved form of Orange King. Flower orange-red, a shade that does not revert and is more deep and lasting than Orange King. It opens easily.

Mary Hicks. Cl. Poly. (E. J. Hicks, 1927.) Flowers deeper, fuller, and larger than Excelsa. Foliage fine. Growth very vigorous.

**May Wettern.* HT. (Alex. Dickson & Sons Ltd., 1928.) Type, Killarney. Bud very large, long-pointed; flower large, double, full, high-centered, lasting, moderately fragrant, rosy pink, borne singly on long, average-strength stem. Foliage sufficient, large, rich green, leathery. Growth vigorous, upright, bushy, taller than the average Hybrid Tea; profuse, continuous bloomer from June to October. Very hardy. Certificate of Merit, N. R. S., 1927; Gold Medal, N. R. S., 1928.

Mistress Pat. D. Poly. (George Lilley, 1928.) Flower moderately fragrant (Sweetbriar), Chatenay pink. Habit good; very early bloomer; good in autumn.

Mrs. F. J. Knight. HT. (John E. Knight & Son, 1928.) Flower of perfect form, moderately fragrant, brilliant, velvety scarlet. Vigorous.

**Mrs. Herbert Dowsett.* HT. (W. Easlea & Sons, 1928.) Sport of Los Angeles. Type, Los Angeles. Bud large, ovoid; flower large, double, full, very lasting, moderately fragrant, several shades deeper than Los Angeles, borne several together on a medium-length stem. Foliage abundant, light green, glossy, disease-resistant. Growth vigorous, bushy; abundant, continuous bloomer.

**Mrs. John Bell.* HT. (John Bell; intro. by Dobbie & Co., 1928.) Type, Lady Inchiquin. Bud large, long-pointed; flower large, double, cupped, very lasting, moderately fragrant, cochineal-carmine, borne singly on a medium-length stem. Foliage abundant, dark green, glossy, disease-resistant. Growth moderate, bushy, profuse bloomer. Gold Medal, Scottish National Sweet Pea, Rose and Carnation Society, 1928.

Mrs. John Whicher. Cl. HT. (Boston Rose Farms, 1928.) Flower large, full, shaped like Mme. Abel Chatenay, very fragrant, pale primrose-yellow, borne on long, strong stem. Foliage beautiful, mildew-resistant. Growth very vigorous (9 ft.); free bloomer.

**Mrs. S. Paton.* HT. (S. McGredy & Son, 1928.) Bud medium size, long-pointed; flower large, double, high-centered, very lasting, slightly fragrant, brilliant orange-scarlet-carmine without any variation, running to an orange base—a very pronounced color, making the flower positively glow, borne on a long stem. Foliage abundant, bronzy dark green, leathery, disease-resistant. Few thorns. Growth very vigorous, bushy; profuse, continuous bloomer from May to

November. Certificate of Merit, N. R. S.

Olive Moore. HT. (A. J. and C. Allen, 1927.) Flower very fragrant, pale rose-pink, each petal reflexing silver-pink. Foliage mildew-resistant. Growth vigorous; free bloomer.

Our Bob. HT. (A. G. Dawes, 1928.) Bud long-pointed; flower very fragrant (HP. scent), rich velvety red, when fully expanded it shows a very pretty golden heart, borne singly. Foliage mildew-resistant. Growth vigorous (2 to 2½ ft.).

Pink Hadley. HT. (George Knight & Sons, 1928.) Sport of Hadley. Type, Hadley except color. Flower clear rose-pink.

Pink Pet. D. Poly. (George Lilley, 1928.) Flower double, bright pink, borne in large clusters. Growth upright; early bloomer.

**Portadown.* HT. (S. McGredy & Son, 1928.) Bud large, long-pointed; flower very large, double, high-centered, very lasting, slightly fragrant, rich deep crimson with a velvety sheen, borne on a long stem. Foliage abundant, large, dark green, leathery, disease-resistant. Growth vigorous, bushy, upright; profuse, continuous bloomer from May to November. Very hardy. Certificate of Merit, N. R. S., 1927; Award of Merit (unanimous), R. H. S., 1928.

**Promise.* Cl. HT. (F. Cant & Co. Ltd., 1929.) Flower single, moderately fragrant (wild rose), salmon-pink, with bright yellow stamens, petals fall before they fade, borne in large, artistic clusters. Foliage almost evergreen. Growth vigorous, climbing; blooms in July and August. Awarded Certificate of Merit by N. R. S. in 1927 as Chin Chin, but has been renamed at request of many admirers.

**Rose Berkley.* HT. (S. McGredy & Son, 1928.) Bud large, long-pointed; flower large, high-centered, very lasting, slightly fragrant, deep rosy salmon-pink suffused orange, and running to an orange base, borne on a long stem. Foliage abundant, medium size, glossy, rich green, disease-resistant. Growth very vigorous, bushy; profuse bloomer from May to November. Very hardy. Glorious in autumn. Certificate of Merit, N. R. S., under name of Souvenir de Rose Berkley.

**Rupert Brooke.* HT. (W. Easlea & Sons, 1928.) Miss Cynthia Forde × Mrs. Wemyss Quin. Type, Nellie Parker. Bud large, ovoid; flower large, double, full, very lasting, moderately fragrant, fawn-pink to cream, borne in clusters on a medium-length stem. Foliage abundant, medium size, light green, leathery, disease-resistant. Growth vigorous, bushy; abundant, continuous bloomer. Very hardy.

**Souv. de George Knight.* HT. (John E. Knight & Son, 1928.) Bud sometimes streaked red; flower very fragrant, rich nankeen-yellow. Foliage glossy, dark green, mildew-resistant. Vigorous, robust; abundant bloomer.

**Souv. de John E. Knight.* HT. (John E. Knight & Son, 1928.) Flower sweetly perfumed, gorgeous terra-cotta, combining three shades of color—salmon-pink with a delicate flesh shading with unexpected bright streaked yellow at base, borne on a strong stem. Foliage dark green. Growth vigorous, upright; free bloomer. Award of Merit.

**The Princess Elizabeth.* HT. (Wheatcroft Bros., 1927.) Sport of The Queen Alexandra Rose. Bud and flower large, double, full, very lasting, moderately perfumed, petals have a groundwork of orange-yellow and are delightfully splashed and edged with deep cerise, borne several together on a medium-length stem. Foliage abundant, large, dark bronzy green, leathery, glossy. Growth very vigorous (2 ft.), bushy; moderate bloomer.

Unique. Mult. (F. Evans, 1928.) Seedling from Tip-Top × a Hybrid Perpetual. Flower fawny orange-salmon of bright tone. Foliage large, handsome, clear light green, mildew-resistant. Growth very vigorous, making natural weeping standard on own stem; continuous bloomer in summer and autumn.

Violet Simpson HT. (James Simpson; intro. by Laxton Bros. and Howard & Smith, 1928.) Flower almost perfect, bright cerise with yellow base. Certificate of Merit, N. R. S., 1928; Gold Medal, Scottish National Sweet Pea, Rose and Carnation Society, 1928.

**William E. Nickerson.* HT. (W. Easlea & Sons, 1928.) Priscilla × William F. Dreer. Type, Lady Inchiquin. Bud large, ovoid; flower large,

double, full, very lasting, moderately fragrant, glowing orange-cerise, borne singly on a long stem. Foliage abundant, large, light green, disease-resistant. Growth vigorous, bushy; free bloomer. Very hardy.

Yellow Los Angeles. HT. (George Mount & Sons, 1927.) Yellow Sport.

FRANCE

GOLD MEDAL ROSES: Amateur E. Biron, Jules Gaujard, Marguerite Chambard, Mme. A. Lerche, Mme. Henri Queuille, Mme. Paul Marchandeau, Souvenir de Pierre Guillot.

Amateur E. Biron. HT. (Biron, 1928.) Flower camellia-shaped, large, very full, shrimp-pink with copper tint in center, reverse old-rose, borne on long, strong stem. Foliage dark green, disease-resistant. Growth very vigorous; profuse bloomer. Gold Medal, Saverne, 1926; Diploma of Honor, Société Centrale d'Horticulture de la Seine-Inf.

Ami Léon Chenault. D. Poly. (Auguste Nonin & Fils, 1928.) Sport of Joseph Guy (Lafayette). Type, Joseph Guy except color. Bright crimson.

**Bonfire.* Mult. (E. Turbat & Co., 1928.) Flower double, dazzling scarlet, borne in large, elongated clusters of 20 to 25 blooms. Foliage light green. Growth very vigorous, climbing; very early bloomer.

**Bouquet Rose.* D. Poly. (Granger-Gaucher; intro. by E. Turbat & Co., 1928.) Bud and flower small, fleshy pink and peach blossom, borne in clusters of 30 to 40 blooms. Foliage rich green. Very few thorns. Growth half dwarf. Easy to propagate.

**Cilly Michel.* HT. (J. Felberg-Leclerc, 1928.) Mme. Mélanie Soupert × Felbergs Rosa Druschki. Bud long-pointed; flower large, full, moderately fragrant, mixture of clear nasturtium brownish red with orange-yellow and coral-red, borne on long, strong stem. Foliage rich green, disease-resistant. Growth vigorous, upright, uniform; very free bloomer.

Cl. Joseph Guy. Mult. (Auguste Nonin & Fils, 1928.) Sport of Joseph Guy. Growth vigorous, trailing, attaining a length of 79 inches; profuse bloomer.

**H. Chaubert.* HT. (Barbier & Co., 1928.) Mrs. Aaron Ward × unnamed seedling. Type, Mrs. Aaron Ward. Bud medium size, oval; flower medium size, semi-double, open, lasting, slightly fragrant, coral or coppery salmon approaching the color of Mme. Edouard Herriot but lasting better in the sun, borne in clusters on a medium-length stem. Foliage abundant, medium size, rich green, glossy, disease-resistant. Growth vigorous, bushy; profuse, continuous bloomer.

**Hélène Robinet.* HT. (J. Sauvageot, 1928.) Unnamed variety × Président Parmentier. Type, Prince de Bulgarie. Bud large, long-pointed, yellow and rose-carmine; flower medium size, double, cupped, lasting, slightly fragrant, salmon-white shaded with rose, yellow at base, borne singly or several together on a medium-length stem. Foliage sufficient, dark green, leathery. Few thorns. Growth vigorous, bushy; free, continuous bloomer from June to November.

**Henri Linger.* HW. (Barbier & Co., 1928.) *Rosa wichuraiana* × Bénédicte Seguin. Bud medium size, oval, orange and yellow; flower medium size, semi-double, open, fairly lasting, slightly fragrant, clear yellow-orange, almost the color of Bénédicte Seguin, borne several together on a medium-length stem. Foliage sufficient, medium size, light green, glossy, disease-resistant. Few thorns. Growth very vigorous, climbing; abundant bloomer in June and July. Very hardy.

Jules Gaujard. HT. (Pernet-Ducher; intro. by J. Gaujard, 1928.) Jean C. N. Forestier × unnamed seedling. Flower very large, cupped, extremely lasting, intensely fragrant, bright orange-red, flushed with carmine, uniform all over the flower, borne singly on strong stem. Foliage bright green, disease-resistant. Few thorns. Growth very vigorous. Gold Medal, Turin, 1928; Certificate of Merit, Bagatelle, 1928.

**Marceline.* HT. (E. Buatois, 1928.) Frau Karl Druschki × Yves Druhin. Bud large, ovoid, opening well; flower large, full, Tyrian purple edged violet-rose, reverse violet-rose, borne on long, strong stem. Foliage abundant. Growth vigorous, upright.

**Marguerite Chambard.* HT. (C. Chambard, 1928.) Bud long-pointed; flower very large, high-centered to globular, slightly fragrant, geranium-red, sometimes shaded vermilion, borne singly on long, strong stem. Foliage sufficient, dark green, disease-resistant. Few thorns. Very vigorous, bushy; profuse bloomer. Gold Medal, Turin, 1928; Saverne, 1928.

Marquise de Barbentane. HT. (Henri Fugier, 1928.) Mrs. Farmer × Séverine. Type, Séverine, in growth. Bud very long-pointed; flower medium size, full, apricot-yellow shaded orange and sunflower-yellow, borne on long, strong stem. Foliage bronzy dark green, glossy. Growth very vigorous, upright, branching. Certificate of Merit, Exposition des Roses, Macon, 1928.

Mme. A. Bouchayer. HT. (Ch. Siret-Pernet, 1927.) Bud long-pointed, coral-red; flower large, full, cupped, strongly fragrant, shrimp-pink, base of petals Indian-yellow. Foliage rich green. Growth vigorous, bushy; profuse bloomer.

**Mme. A. Galland.* HT. (M. Mallerin; intro. by M. Laperrière, 1928.) Pharisäer × Constance × unnamed Pernetiana. Bud large, long-pointed, clear rose-flesh; flower large, double, full, lasting, very fragrant, rose-pink, shaded shrimp-pink, borne singly on a long stem. Foliage sufficient, large, leathery, subject to mildew. Few thorns. Growth vigorous, upright; abundant, continuous bloomer. Very hardy.

**Mme. A. Lerche.* HT. (P. Bernaix.) Mme. L. Hot × Mrs. Henry Winnett. Bud long-pointed, China-rose-carmine shaded coppery yellow; flower large, full, cupped, China-rose shaded velvety carmine, reverse of petals silvery rose, stamens chrome-yellow, borne on a strong stem. Foliage bronzy green. Few thorns. Growth vigorous, slightly diverging; profuse bloomer. Gold Medal, Saverne, 1928.

Mme. Charles Allizon. HT. (A. Schwartz, 1928.) Mme. Vittoria Gagnière × Lady Pirrie. Bud long-pointed, opening well; flower large, full, well-formed, pinkish white, center tinted cream-pink, lightly flushed carmine, edges of petals tinted yellow. Foliage bronzy dark green. A vigorous grower.

Mme. Forest. HT. (Louis Walter, 1928.) Lieutenant Chauré × Mrs. George Shawyer. Bud very pretty; flower tender pink. Growth bushy; profuse bloomer.

Mme. Francois Hvt. HT. (A. Schwartz, 1928.) Lady Pirrie × Mme. de Beauvoir. Bud long-pointed, of pretty form and large petals; flower opens well, salmon, shaded coppery rose, edges of petals tinted pinkish white, interior salmon-chamois. Growth vigorous.

Mme. Henri Queuille. HT. (Pernet-Ducher; intro. by J. Gaujard, 1928.) Bud long-pointed; flower very lasting, deliciously fragrant, very bright shrimp-pink, deeper at center, shaded coppery and gold on reverse. Foliage bronzy green, disease-resistant. Few thorns. Growth very vigorous, branches long and flexible. Gold Medal, Turin, 1928; Congratulations of Jury, Angers, 1927.

Mme. Paul Marchandeau. HT. (E. Barbaras, 1928.) Bud long-pointed; flower of perfect form, very lasting, moderately fragrant, white, deep yellow at base. Foliage abundant. Growth upright. Gold Medal and Congratulations of Jury at International Exposition, Reims, 1928.

Mme. Van de Voorde. HT. (C. Mallerin; intro. by Henri Guillot, 1928.) Type, K. of K., but better. Flower semi-double, very fragrant, bright scarlet that does not blue, borne on strong stem. Healthy.

Mont-à-camp. HP. (Marcel Delobel, 1928.) Bud long, ovoid, orange-yellow, lighter when opening; flower very large, opens well in all weathers, full, fine pure yellow inside, shaded with bright orange on the outside, borne on long, strong stem. Foliage bright green, mildew-resistant. Growth very vigorous, upright.

Primrose. HW. (Barbier & Co.) intro. in U. S. by Henry A. Dreer. See page 219.

**Souvenir de Francois Graindorge.* HT. (Grandes Roseraies, 1928.) Bénédicte Seguin × Lady Hillingdon. Type, Mme. Abel Chatenay. Bud large, long-pointed; flower medium size, double, cupped, very lasting, moderately perfumed, ochre-yellow with Indian-yellow at base, borne several together on a long stem. Foliage glossy, leathery. Growth very vigorous; continuous bloomer.

Souvenir de Pierre Guillot. HT. (M. Guillot, 1928.) Marie Adelaide × unnamed seedling. Bud long-pointed, coral-orange, inside of petals orange with tints of tango; flower large, double, well-formed, slightly fragrant, yellow at base, sometimes half the flower clear coral while the other half takes on an orange tint that makes it luminous, fades to rose-coral. Foliage abundant. Growth very vigorous, branching; abundant bloomer. Gold Medal, Turin, 1928.

**Souv. du Capitaine Grémona.* HT. (P. Bernaix, 1928.) Admiration × Gorgeous. Bud ovoid, primrose-yellow shaded greenish white and coppery pink; flower very large, well formed, full, high-centered, moderately fragrant, salmon-carmine over aurora-yellow ground, borne on a strong stem. Foliage bronzy green, disease-resistant. Few thorns. Growth vigorous, slightly bushy, diverging; profuse bloomer. Silver Medal, Saverne, 1928.

Souv. de Prosper Fraissenon. HT. (C. Richardier, 1927.) Bud long-pointed, Adrianople red; flower geranium-red tinted vermilion with beautiful tint of violet when completely open. Foliage rich green, disease-resistant. Growth vigorous, robust, bushy.

GERMANY

GOLD MEDAL ROSES: August Noack, Frau Luise Lindecke, Heinrich Eggers.

**August Noack.* HT. (W. Kordes Söhne, 1928.) Sport of Columbia. Type, Columbia. Bud very large, long-pointed; flower very large, extremely double, open, high-centered, very lasting, strong old-rose scent, good deep scarlet especially indoors where it comes as red as Matchless, borne singly on long, strong stem. Foliage sufficient, large, bronzy dark green, leathery, disease-resistant. No thorns. Growth vigorous, bushy; free, continuous bloomer from June to November. Tips freeze. Great State prize of Thüringen, 1928.

**Auguste Kordes.* Mult. (W. Kordes Söhne, 1928.) Sport of Lafayette. Type, Paul's Scarlet Climber, but perpetual bloomer. Bud very large, long-pointed; flower very large, semi-double, open, high-centered, very lasting, slightly fragrant, light glowing scarlet like Lafayette, borne in clusters on long, strong stem. Foliage abundant, large, light green, leathery, glossy, disease-resistant. Few thorns. Growth very vigorous, climbing; profuse, intermittent bloomer from June to November. Tips freeze.

**Christoph Weigand.* HT. (Christoph Weigand, 1928.) Frau Karl Druschki × Souvenir de Claudius Pernet. Type, Dean Hole and La France. Bud very large, long-pointed; flower very large, extremely double, full, high-centered, very lasting, slightly fragrant, light La France pink, borne singly on long, strong stem. Foliage sufficient, large, rich green, wrinkled, mildew-resistant. Few thorns. Growth vigorous (2 ft. and more), upright; abundant, free, and continuous bloomer, giving 15 to 20 blooms in a season. Hardy. Two Honorable Mentions.

Felbergs Rosa Druschki. HP. (J. Felberg-Leclerc, 1929.) Frau Karl Druschki × Farbenkönigin. Type, Frau Karl Druschki. Flower large, clear bright rose-pink, borne on long, strong stem.

**Frau E. Weigand.* HT. (Christoph Weigand, 1928.) Mme. Caroline Testout × Souvenir de Claudius Pernet. Type, Mme. Caroline Testout. Bud medium size, ovoid; flower large, double, globular, high-centered, lasting, very fragrant (like Maréchal Niel), color like Golden Emblem, generally borne singly on medium-length, strong stem. Foliage abundant, large, dark green, leathery. Many thorns. Growth vigorous, upright (1 to 1½ ft.); moderate bloomer from June to October. Quite hardy. Two Honorable Mentions.

**Frau Luise Lindecke.* HT. (Herm. Lindecke; intro. by originator and W. Kordes Söhne, 1928.) Sport of Columbia. Type, La Tosca. Bud large, ovoid, light red; flower large, double, open, globular, very lasting, strong old-rose scent, deep claret-red, sometimes crimson, very good in strong sunshine as it never fades, borne several together on long, strong stem. Foliage sufficient, medium size, dark green, leathery, disease-resistant.

No thorns. Growth very vigorous, upright; profuse, continuous bloomer from June to November. Tips freeze. Gold Medal, Verein Deutscher Rosenfreund, Solingen, 1927.

Frau Margarete Oppenheim. HT. (J. Felberg-Leclerc, 1928.) Hortulanus Budde × Souvenir de Claudius Pernet. Bud long-pointed, gorgeously colored; flower large, half-full, bell-shaped, intense carmine-red with brick-red and strong yellow glow. Foliage rich green, leathery. Growth vigorous, upright; abundant, continuous bloomer.

Frau Robert Türke. HT. (Robert Türke; intro. by V. Teschendorff, 1928.) Hadley × Hugh Dickson. Type, Hadley. Bud medium size, long-pointed; flower medium size, very double, full, lasting, moderately fragrant, dark crimson, borne singly on long stem. Foliage sufficient, medium size, dark green, glossy, disease-resistant. Growth vigorous, upright; free bloomer. Tips freeze.

**Hans Billert.* HT. (Billert; intro. by V. Teschendorff, 1928.) Laurent Carle × Richmond. Type, Ulrich Brunner. Bud medium size, ovoid; bloom medium size, very double, full, extremely lasting, moderately fragrant, brilliant red, borne singly on long stem. Foliage sufficient, medium size, rich green, soft, disease-resistant. Few thorns. Growth vigorous, upright. Tips freeze.

**Heinrich Eggers.* HT. (W. Kordes Söhne, 1928.) Mrs. Charles E. Russell × Mrs. Wemyss Quin. Type, Betty Uprichard in plant. Bud very large, long-pointed, ruby-red; flower very large and double, full, high-centered, extremely lasting, moderately fragrant, orange-copper, often with lighter outer petals, borne singly on long, strong stem. Foliage normal, medium size, bronzy green, leathery, wrinkled, disease-resistant. Many thorns. Growth very strong, upright; free, intermittent bloomer from June to November. Tips freeze. Great State Medal of Thüringen, 1928.

J. F. Müller. D. Poly. (J. F. Müller, 1928.) Sport of Rödhätte. Flower dark red, unfading—darker and deeper than the parent.

Johanna Tantau. D. Poly. (Math. Tantau, 1928.) Dorothy Perkins × Ophelia. Bud medium size, ovoid; flower large for a Polyantha, double, full, lasting, fresh rose-pink, yellowish at base, clear white when fully open, borne in clusters on a medium-strength stem. Foliage abundant, medium size, dark green, leathery, disease-resistant. Growth moderate, bushy, dwarf; profuse, continuous bloomer from spring to autumn.

**Königin Luise.* HT. (Christoph Weigand, 1927.) Frau Karl Druschki × Sunburst. Type, Mrs. Charles Lamplough. Bud very large, ovoid; flower very large, extremely double, full, high-centered, very lasting, slightly fragrant, white (like Kaiserin Auguste Viktoria), borne singly and several together on long stem. Foliage abundant, large, dark green, leathery, glossy. Growth very vigorous, upright, bushy; profuse, continuous bloomer from June to October. Very hardy. Two Honorable Mentions.

Marie Maass. HT. (Conrad Maass, 1928.) Kaiserin Auguste Viktoria × Maréchal Niel. Bud and flower very large, extremely double, full, very lasting, strongly fragrant, pure white turning to ivory-white, borne singly on a medium-length stem. Growth vigorous, upright, bushy, stronger than Kaiserin; free, intermittent bloomer.

Mieze Schwalbe. D. Poly. (Lohse & Schubert, 1927.) Sport of Frau Rudolph Schmidt. Flower rose-red. Stronger grower than the parent; healthy; free-blooming.

**Oberbürgermeister Heimerich.* HT. (Christoph Weigand, 1929.) Frau Karl Druschki × Souvenir de Claudius Pernet. Type, Hadley. Bud large, long-pointed; flower large, double, full, high-centered, lasting, slightly fragrant, fresh rose color, some petals lighter at back, borne singly on a long stem. Foliage sufficient, large, rich green, glossy. Growth very vigorous, upright (2 ft. and over); free bloomer from June to October. Very hardy.

Prasident Hindenburg. D. Poly. (C. Bonn; intro. by P. Lambert, 1927.) Seedling of Greta Kluis. Bud dark carmine-red; flower large, double, full, globular, carmine to deep red, white at base, borne in upright clusters on long stem.

Professor Gnau. HT. (Math. Tantau, 1928.) Oskar Cordel × unnamed seedling. Bud large, long-pointed, yellow; flower large, double,

cupped, lasting, strongly fragrant, creamy white, borne singly or several together on a long, strong stem. Foliage abundant, large, dark green, leathery, disease-resistant. Few thorns. Growth vigorous, upright; abundant, continuous bloomer from spring to autumn. Very hardy.

**Teschendorff Jubilaumsrose.* D. Poly. (V. Teschendorff, 1928.) Sport of Orléans Rose. Bud very large; flower large, extremely double, full, very lasting, slightly fragrant, color similar to Orléans Rose but more brilliant and a little darker, borne in clusters on long stem. Foliage abundant, large, disease-resistant. Few thorns. Growth very vigorous; profuse, continuous bloomer from June to September. Very hardy.

THE NETHERLANDS

GOLD MEDAL ROSES: Gloria Mundi, Prinzessin M. von Arenberg

**Albast.* HT. (G. A. van Rossem, 1928.) Morgenglans × Mrs. Wemyss Quin. Type, Mme. Léon Pain. Bud medium size, ovoid; flower large, double, open, lasting, slightly fragrant, salmon-pink, borne several together on medium-length stem. Foliage sufficient, medium size, bronzy green, glossy, disease-resistant. Growth vigorous, upright; abundant bloomer from June to October. Very hardy.

**Baronesse H. von Geyr.* HT. (M. Leenders & Co., 1928.) (Farbenkönigin × Juliet) × Sunburst. Type, Mme. Abel Chatenay. Bud large, ovoid; flower large, double, full, lasting, moderately fragrant, pale flesh and vermilion-red, borne several together on medium-length stem. Foliage abundant. Growth vigorous, bushy; abundant bloomer.

**Dr. Augustin Wibbelt.* HT. (M. Leenders & Co., 1928.) Sport of Los Angeles. Bud medium size, long-pointed; flower large, semi-double, open, moderately fragrant, golden yellow shaded orange-cadmium, medium-length stem. Foliage abundant, medium size, light green. Growth bushy; profuse bloomer. Silver Medal, Alsace-Lorraine Rose Society.

Europa. HT. (J. Keesen, 1928.) Sport of Columbia with better blooms of pure bright pink, but like parent in other respects. Does not fade or turn blue; deeper under glass.

**Fancy.* HT. (G. A. van Rossem, 1928.) Souvenir de Claudius Pernet × General Smuts. Bud medium size, ovoid; flower medium size, semi-double, open, lasting, slightly fragrant, peach with cherry-red shadings on yellow base, borne several together on a medium stem. Foliage abundant, dark bronzy green, glossy, disease-resistant. Growth vigorous, upright; free bloomer from June to November. Hardy. Certificate of Merit, R. H. S. of the Netherlands.

Gloria Mundi. D. Poly. (Sliedrecht & Co., 1928.) Neat, full, well-formed flowers of the most brilliant scarlet-orange color imaginable, said to be unfading. Awarded Gold Medal of Nos Jungunt Rosæ by acclamation, 1928; Award of Merit, R. H. S., 1928.

Greta Kluis Superior. D. Poly. (Anth. Kluis, 1928.) Larger, deep carmine-red flowers and stronger grower than Greta Kluis. Very early.

**Leni Neuss.* HT. (M. Leenders & Co., 1928.) Lilly Jung × Baronesse van Tuyll van Serooskerken. Bud very large, long-pointed; flower very large, full, moderately fragrant, hydrangea-pink, reverse reddish old-rose on a reddish salmon ground, borne several together on a long stem. Foliage abundant. Growth very vigorous, upright, bushy; abundant bloomer. Certificates: Nos Jungunt Rosæ and R. H. S. of the Netherlands.

Magnifique. D. Poly. (Sliedrecht & Co., 1927.) Flower double, beautifully fringed, bright pink, like Dorothy Perkins but three weeks earlier, borne in clusters. Good bushy habit

Marytje Cazant. D. Poly. (Van Nes, 1927.) Sport of Jessie. Buds salmon-pink on white ground, globular, lasting.

**Mevrouw Amélie Müller.* HT. (H. A. Verschuren & Sons Ltd., 1927.) Golden Ophelia × Golden Emblem. Type, Ophelia. Bud medium size, ovoid; flower very large and double, globular, lasting, moderately fragrant, old-gold, shaded orange, borne singly or in threes on a strong stem. Foliage sufficient, bronzy, dark green, leathery, glossy, disease-resistant. Few thorns. Very vigorous, bushy grower, shooting 20 to 24 inches. Abundant, continuous bloomer; hardy in Holland.

**Mevrouw Dr. L. Crobach.* HT. (M. Leenders & Co., 1928.) Pink Pearl × Red Star. Bud large, ovoid; flower large, double, full, moderately fragrant, cochineal-carmine on salmon-carmine base, borne several together on a medium-length stem. Foliage abundant, rich green. Growth vigorous, bushy; abundant bloomer.

**Mme. Emilie van der Goes.* HT. (H. A. Verschuren & Sons Ltd., 1925.) Columbia × Irish Fireflame. Type, Columbia, but more bushy. Bud very large, long-pointed, very lasting, orange-yellow and rosy shadings; flower large, semi-double, full, fairly lasting, moderately fragrant, more pink than bud, borne singly or in threes on a long, strong stem. Foliage sufficient, medium size, bronzy green, leathery, disease-resistant. Growth moderate and bushy, shooting 16 to 20 inches; abundant bloomer.

**Odorata.* HT. (G. A. van Rossem, 1928.) Sunburst × Ma Fiancée. Bud medium size, ovoid; flower large, double, cupped, lasting, intensely fragrant, carmine-pink, reverse of petals white with pink edges, base of petals golden yellow, borne several together on a medium-length stem. Foliage sufficient, large, dark green, leathery, disease-resistant. Growth vigorous, bushy; abundant bloomer from June to October. Very hardy. Certificate of Merit and Des Tombe Medal for the best-scented new rose at the rose show of Nos Jungunt Rosæ, The Hague, July, 1928.

**President Jac. Smits.* HT. (H. A. Verschuren & Sons Ltd., 1928.) Etoile de Hollande × K. of K. Type, K. of K. but much stronger. Bud very large, long-pointed; flower large, semi-double, full, lasting, moderately fragrant, brilliant dark red, quite a new type of red, borne singly or in threes on a strong stem. Foliage sufficient, medium size, bronzy green, leathery, disease-resistant. Growth very vigorous, bushy, shooting 20 to 24 inches; profuse bloomer. Hardy Best planted in masses.

**Prinzessin M. von Arenberg.* HT. (M. Leenders & Co., 1928.) Ophelia × Los Angeles. Bud very large, ovoid; flower very large and double, intensely fragrant, rosy white shaded pale rose-pink, borne singly or several together on a long stem. Foliage sufficient, medium size, dark green. Growth very vigorous and upright; abundant bloomer. Gold Medal, Alsace-Lorraine Rose Society.

Rudolph Kluis Superior. D. Poly. (Anth. Kluis, 1928.) Flower brilliant, glowing scarlet, very close to the color of Paul's Scarlet Climber. Grows more compact than Rudolph Kluis and Lady Reading.

AUSTRALIA

GOLD MEDAL ROSE: Edith Clark

**Countess of Stradbroke.* HT. (Alister Clark; intro. by Hazlewood Bros., 1928.) Walter C. Clark × unnamed variety. Type, Walter C. Clark. Bud large, ovoid; flower large, double, bell-shaped, globular, lasting, moderately fragrant, dark red, borne singly or several together on normal stems. Foliage normal, medium size, rich green, wrinkled, disease-resistant, does not fade. Few thorns. Vigorous climbing or pillar rose. Free, continuous bloomer.

**Edith Clark.* HT. (Alister Clark; intro. by Hackett & Co., 1928.) Mme. Abel Chatenay × unnamed variety. Type, Lady Maureen Stewart. Bud medium size, ovoid; flower medium size, double, globular, very lasting, slightly fragrant, fiery red, practically unfading, borne singly on medium-length stem. Foliage normal, medium size, rich green, disease-resistant. Few thorns. Growth moderate, dwarf; free, continuous bloomer. Gold Medal, N. R. S. of Victoria, 1927.

**Milkmaid.* H. Nois. (Alister Clark; intro. by S. Brundrett, 1925.) Crépuscule × unnamed variety. Type, Claire Jacquier. Bud and flower small, semi-double, open, very lasting, moderately fragrant, white tinted fawn, borne in clusters on a long stem. Foliage abundant, medium size, rich green, disease-resistant. Growth very vigorous, climbing; profuse bloomer for six weeks.

**Mrs. Philip Russell.* HT. (Alister Clark; intro. by Hackett & Co., 1927.) Hadley × Red-Letter Day (probably). Type, Hawlmark Crimson. Bud medium size, long-pointed; flower medium size, semi-double, open, very lasting, slightly fragrant, dark, glow-

ing, fiery red, shaded black, borne several together on long stem. Foliage sufficient, medium size, glaucous green, disease-resistant. Growth vigorous, semi-climbing pillar or large bush; free, continuous bloomer.

**Tonner's Fancy.* H. Gig. (Alister Clark; intro. by Gill & Searle, 1928.) Gigantea seedling × unnamed variety. Bud medium size, ovoid; flower beautifully formed, large, double, globular, very lasting, moderately fragrant, white, tinged pink in opening bud, borne singly on a medium-length stem. Foliage abundant, large, dark green, disease-resistant. Growth very vigorous, climbing; abundant bloomer in spring only.

SPAIN

GOLD MEDAL ROSES: Director Rubió, Lí Burés

**Director Rubió.* HP. (P. Dot, 1928.) O. Junyent × Jean C. N. Forestier. Bud large, long-pointed; flower very large, semi-double, lasting, moderately fragrant, magenta-red, borne singly on stiff stem. Foliage abundant, large, disease-resistant. Growth very vigorous, bushy; abundant bloomer from May to November. Gold Medal, Saverne, 1928.

**Federico Casas.* HT. (P. Dot, 1929.) Unnamed variety × Eugène Barbier. Bud very large, long-pointed, red; flower very large, semi-double, open, very lasting, intensely fragrant, red and yellow, borne singly on long, strong stem. Foliage abundant, large, dark green. Growth vigorous, bushy; profuse bloomer from May to November.

**Isabel Llorach.* HP. (P. Dot, 1929.) Frau Karl Druschki × Bénédicte Seguin. Type, Frau Karl Druschki. Bud very large, long-pointed; flower very large, semi-double, open, lasting, moderately fragrant, nankeen-yellow, tinted red, borne singly on a long stem. Foliage abundant, large, dark green, glossy, disease-resistant. Few thorns. Growth very vigorous, semi-climbing; abundant, intermittent bloomer from May to July and again in October.

**Lí Burés.* HT. (P. Dot, 1928.) Chateau de Clos Vougeot × Souvenir de Claudius Pernet. Type, Souvenir de Claudius Pernet. Bud and flower medium size, double, cupped, slightly fragrant, rose-red and yellow mixed. Foliage sufficient, large. Growth very vigorous, bushy; abundant bloomer from May to October. Gold Medal, Saverne, 1926.

**Pardinas Bonet.* HT. (P. Dot, 1929.) La Giralda × Souvenir de Claudius Pernet. Bud large, oval; flower large, double, globular, lasting, intensely fragrant, deep yellow, outside red, borne singly on a long stem. Foliage sufficient, medium size, shiny, disease-resistant. Few thorns. Growth moderate, dwarf; abundant, continuous bloomer from May to December.

LUXEMBOURG

**Les Amis de Lille.* HT. (Ketten Bros., 1928.) Golden Emblem × Président Bouché. Bud egg-shaped, Lincoln-red on pale buff ground; flower large, rather flat, very full, pale buff, edges and reverse of petals suffused with salmon-pink, borne singly on long, strong stem. Vigorous, upright grower of branching habit; very free bloomer. Hardy.

**Mme. Georges Petit.* HT. (Ketten Bros., 1928.) General MacArthur × Mme. Edouard Herriot. Bud long-pointed, opens well in all weathers; flower large, full, high-centered, intensely fragrant, dazzling purple-red, cleared crimson-red with a slightly velvety sheen, borne singly on a long, strong stem. Foliage Quaker-green, disease-resistant. Growth very vigorous, upright; continuous bloomer.

**Souvenir de Pierre Ketten.* HT. (Ketten Bros., 1928.) Mme. Mélanie Soupert × Pilgrim. Bud long-pointed, the shade of peach blossoms with a light suffusion of carmine tints; flower of perfect form, very large, full (30 to 35 petals), high-centered, lasting, deliciously fragrant, bright rose, inside of petals hydrangea-pink, base chrome-yellow, more or less pronounced according to temperature, borne singly on a long, strong stem. Foliage spinach-green, disease-resistant. Few thorns. Growth very vigorous, upright, free branching; continuous bloomer from June to November. Always develops well.

ROUMANIA

Alexander Marghiloman. HT. (Arpád Mühle, 1928.) Seedling of Harry Kirk. Bud bright yellow; flower large, cream-white, with orange center, in style of Aspirant Marcel Rouyer. Growth vigorous.

Banater Rose. HT. (Arpád Mühle, 1927.) Bud elegantly shaped, opening to large, full, finely formed blooms of soft creamy white, with gold shaded center. Foliage bronzy brown, mildew-resistant. Growth vigorous, free-branching; profuse bloomer.

Die Prasidentin. HT. (Arpád Mühle, 1928.) Bud long-pointed; flower large, marble-white with ochre-yellow center. Foliage disease-resistant. Growth vigorous.

Dr. Ernst Mühle. HT. (Arpád Mühle, 1928.) Flower large, well-formed, full, soft rose, suffused salmon-cream, very lasting. Growth vigorous, free-branching.

Fritz Schrodter. HT. (Arpád Mühle, 1928.) Flower carmine-red. Growth vigorous; abundant bloomer.

Grafin Minnie Schaffgotch. HT. (Arpád Mühle, 1928.) Flower large, full, alabaster-white with pale pink tint.

CZECHO-SLOVAKIA

**Dr. Heinrich Lumpe.* HT. (V. Berger, 1928.) Constance × Admiral Ward. Bud very large to large, long-pointed; flower large, very double, full, high-centered, very lasting, fragrant, light rose-pink, yellow at base, borne several together on long, strong stem. Foliage abundant, large, deep green, leathery, disease-resistant. Many large thorns. Growth very vigorous, upright, bushy; abundant, continuous bloomer. Hardy.

BELGIUM

**Climbing Kate Moulton.* Cl. HT. (A. Opdebeeck fils, 1928.) Bud large, long-pointed; flower double, full, very lasting, eglantine-rose shaded with salmon-rose, borne two or three together on long stem. Foliage abundant, large, dark green, disease-resistant. Growth very vigorous, climbing; abundant, continuous bloomer from June to November.

Roses Registered in 1928-1929

Autumn, HT., by L. B. Coddington, Murray Hill, N. J.

Betty Baum, HT., by Chas. L. Baum, Knoxville, Tenn. See 1928 Annual.

**Chicago*, HT., by J. Aldous, Iowa City, Iowa.

Dorothy Drowne, Cl. HW., by Josephine and Walter D. Brownell, Providence, R. I.

Erie Treasure, H. Rug., by Chester D. Wedrick, Nanticoke, Ontario, Canada.

**Fred H. Howard*, by John Smith, Hayward, Calif.

Harriet Neese, by Harry B. Conyers, Urbana, Ohio.

Horden Hall, HW., by Harry B. Conyers, Urbana, Ohio.

**Indian Maid*, by F. B. Ward, Bay City, Mich.

**Miss California*, HT., by John Smith, Hayward, Calif.

Mrs. Herbert Hoover, HT., by L. B. Coddington, Murray Hill, N. J.

**Opal*, by F. B. Ward, Bay City, Mich.

Pasadena, HT., by Coolidge Rare Plant Gardens, Pasadena, Calif.

**Phantasy*, HT., by John H. Dunlop & Son Ltd., Richmond Hill, Ontario, Canada.

President Herbert Hoover, HT., by L. B. Coddington, Murray Hill, N. J.

**Red Beauty*, HT., by John H. Dunlop & Son Ltd., Richmond Hill, Ontario, Canada.

*Indicates in process of registration.

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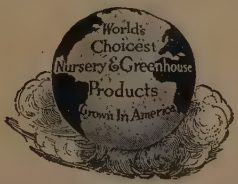

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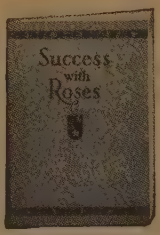

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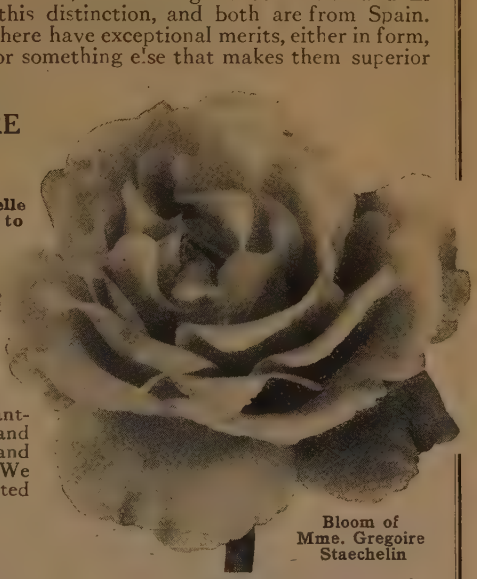

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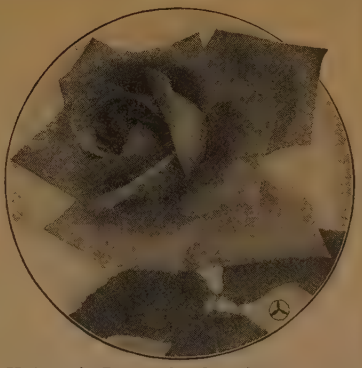

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